

THE MARINE RECORD

ESTABLISHED 1878

VOL. XIX. NO. 23.

CLEVELAND—JUNE 4, 1896—CHICAGO.

\$2 PER YEAR. 10c. SINGLE COPY.

FOREIGN INSURANCE ON THE GREAT LAKES.

Fairplay, of London, has begun to look into the methods and results of insurance by Lloyd's indemnities on the Great Lakes' and some interesting things may be looked for. The following comment appears in the issue of May 22:

The following shows how Lloyd's underwriters suffer, and incidentally cause lake underwriters to suffer, by not having competent examinations of lake claims. On July 24 last year, the E. P. Wilbur went aground on Gray's Reef, Lake Michigan. Quoting from the protest: "About 1:30 p. m. wind shifted to the westward and calmed down, weather still threatening. About 4 p. m. steambarge C. H. Starke came in sight bound down and without cargo. Signaled her to come to us. Got well made fast alongside about 5:30 p. m. with her bow to our stern, and started backing strong with our engine, the Starke working ahead strong. Lightered about 75 tons of cargo on to her. Blew off our port and starboard boilers to lighten ship. After backing and filling we were released at 7:50 p. m. Then reloaded lightered freight. Finished reloading at 10:10 p. m., and proceeded on our voyage arriving without mishap at Buffalo at 6:15 p. m. on the 17th."

The Starke is a little steamer worth about \$15,000. She put in a claim of \$7,000 salvage, and this was settled for \$3,500 by owners of the E. P. Wilbur and was so charged in the adjustment, together with \$300 counsel's fee. The Starke consequently gets about 25 per cent. of her value for five hours work of lightering, which strikes one as extremely liberal. The adjuster charged \$1,000 for the adjustment, this also being based on the same magnificent scale. If the steamer had been insured on the lakes the adjustment would not have exceeded \$500, and the lake underwriters would have contested the Stark claim sooner than pay more than \$1,000.

WORK OF THE FIVE-CRANK ENGINE.

An unusual degree of interest has been shown in Great Britain in connection with the trials of the steamship Inchmona, whose machinery was described in last week's issue of THE RECORD. She was built by Wm. Gray & Co., Ltd., of West Hartlepool, to the order of Messrs. Hamilton, Fraser & Co., of Liverpool. She is an ordinary cargo carrier, of very full model, being 335 feet long by 46½ feet beam, and carrying 5,000 tons deadweight on 20 feet 6 inches draft. Particular attention is called to these dimensions, and the ability of such a steamer to load almost a full cargo after a twenty-foot channel on the lakes has been obtained.

The new departure in the engine room consists generally in the adoption of a number of details tending toward economy of fuel. The boiler pressure is raised to as high as 255 pounds working pressure, the boiler having been tested by Lloyd's to 510 pounds per square inch. The Inchmona is supplied with the first set yet built of Mr. Mudd's patent five-crank engines, which are regarded on the one hand as highly advantageous in themselves, and on the other as especially applicable in the case of large power for the use of high-pressure steam. On the trials on May 5 and 6 steam was easily maintained at 255 pounds, while the engines were running steadily at about 80 revolutions, with the induced draft fan running at as easy a speed as 180 to 200 revolutions per minute. During the trials the boilers and all steam joints remained absolutely steam-tight, and the engines ran in the most satisfactory manner possible. No bearing of any kind showed the slightest sign of warming, and although the engines were run for many hours at 80 revolutions per minute, no difficulty of any kind arose. The coal used during the trials was carefully weighed for four separate runs in the presence of four separate groups of visitors. On the

first run the consumption was 1,144 lbs. of coal per horse power per hour; on the second run, 1,078 lbs.; on the third run, 999 lb.; and on the fourth run, 1,069 lbs. The average of these is 1.07 of north country coal per horse-power per hour, which is naturally regarded as a very remarkable result, and if it can be maintained in regular sea service the machinery of the Inchmona, according to the best authorities, will mark the beginning of a new and important step in advance in marine machinery.

MARINE RECORD Life Savers' Series.

CAPT. M. A. McLENNAN.

One of the younger generation of keepers is the man who was given charge of the Middle Island Life-Saving Station, Lake Huron, when Capt. McKenzie was transferred to Duluth, at the opening of navigation last year. Capt. M. A. McLennan was born in 1862, on the Island of Lewis, Ross-shire, Scotland, and was engaged in fishing from the time he was a mere boy. He followed this occupation all around Scotland and Ireland until 1886.



CAPT. M. A. McLENNAN.

when he crossed the Atlantic. He came to this country in July of that year, and came to the Great Lakes, enlisting in the life-saving service at Middle Island station the following spring, with Capt. McKenzie. He served four years at this station, and then transferred to Ottawa Point station, where he served four years more under Capt. Ocha. He was appointed keeper of Middle Island station April 1, 1895.

SOMETHING NEW IN OARS.

Thomas Dunlap, of Toledo, O., has secured a patent (No. 560,980) on an oar. The front side of the blade is formed with a face molded on the lines of one-half the interior of a cylinder, the diameter of which equals the blade, and the center line of which is parallel to the center lines of the shaft of the oar extended. The rear side of the blade is molded on lines longitudinally parallel to the longitudinal lines of the front face, and so drawn as to present in cross-section the outline of an equilateral pointed arch.

AN IMPORTANT CONSOLIDATION.

The Gas Engine & Power Co., whose speciality, the Naphtha Launch, has gained such world-wide popularity, and Charles L. Seabury & Co. whose unprecedented success in the production of high-class steam yachts has put them far in advance of all competitors, have just united forces, and will at once commence the erection of new buildings and other extensive additions to the already large plant at Morris Heights, including several sets of ship's ways, and probably a sectional dry dock. When the plant is completed it will represent not only the largest of the kind in the world, but the most complete, embodying the modern mechanical appliances for handling that class of business in a superior as well as an economical manner. The present production covers a wide field, embracing, as it does, steam yachts and launches, electric boats of various types, also sail craft, will now be increased, and hereafter include all kinds of pleasure craft from a row boat to a cup defender, or an ocean-going steam-yacht. There will be a special department for the construction of steel hulls, and doubtless ere long the building of torpedo boats will be a feature.

Utilizing their own modern and improved designs in steam engines, and the well-known Seabury Water Tube Boilers, makes possible the furnishing of the entire machinery, as well as hull, cabin work &c., thus facilitating in the highest degree the opportunities of the marine architect to devolve the best possible results in economy of space and high speed, the general practice of the day being for one concern to build the hull, another the engine, the third the boiler, and perhaps the fourth, fifth and sixth, the cabinet work, electric plant, furnishings, &c., thus making doubtful the weights and displacements, and adding confusion by reason of the many different interests involved. The new company will, however, and with their own employees, complete boats from keel to truck, even to the furnishings and supplies. The yachtsman who places his order in the fall, can take his customary winter trip abroad, and returning in the spring, have his new yacht meet him down the bay, fully equipped, manned and provisioned for the summer cruise.

A commodious storage basin for the winter accommodation of yachts, and marine railways for hauling out, are provided. Contracts will be undertaken for all kinds of yacht repairs on hulls, cabin work, machinery, electric plants, also upholstery, decorating etc., etc.

The convenience of the location will be appreciated by owners who enjoy watching the progress of the work as it enables those who reside in the city of New York to reach the works at Morris Heights in seventeen minutes from the Grand Central depot, by Hudson River road, or in one hour from the lower part of the city by the Elevated, changing at 155th street to the N. Y. & Putnam railway. Yachts can be run up the East and Harlem rivers to the works, or through from the Hudson River, there being 13 ft. depth at low water.

The down-town office at 50 Broadway, established by Seabury & Co., will be continued, and models, plans, illustrations etc., kept there for inspection. An insurance and brokerage department is to be made a feature, where policies will be looked after, the buying and selling of boats on a commission basis, and charters affected on the usual terms. In point of fact, it is the intention to establish an up to date Yacht Emporium.

The whaleback steamer J. L. Colby cleared May 30 from Norfolk, Va., for Duluth with barge 110. She will pick up the 201 and 202 at New York and expects to reach the lakes before the end of the month. Some of them have to be cut in two to get up the St. Lawrence.

THE DULUTH-SUPERIOR BRIDGE.

The Duluth-Superior Bridge Co. has at last advertised for proposals on a new bridge connecting Connor's Point, Superior, and Rice's Point, Duluth. The plans and specifications were prepared by the company's consulting engineer in New York, and have been received here. The contract will be let in three parts, the dredging, substructure, and superstructure. About two months must elapse before the contract is finally let.

As will be seen by the illustration, the project for a double deck structure has been dropped. The plans show a bridge which will be able to accommodate all the traffic which, will pass between the two cities for many years to come. The structure is to be of stone and steel, and the entire length over all, including the approaches, which are also to be of steel, will be 1,300 feet. The approaches are to be not over 200 or 300 feet, and the rise will be about 12 feet.

The bridge is to be built in three spans, the center one of which is the draw for the accommodation of the vessel interests. On either side of the draw span are two fixed spans, each to be 302 feet in length, while the draw span will be 483 feet long. It will have 200 feet in the clear on either side of the center pier. This pier, on which the bridge will turn, will be 40 feet in diameter and of solid masonry. The turning power to be used is electricity and it is estimated that the bridge can be opened in less than one minute.

The lowest portion of the bridge is 20 feet above the level of the water, which will allow tugs and other small craft to pass beneath.

In the center of the bridge will run two railroad tracks for the steam cars, and the portion used by them is to be walled up along the sides to prevent the unnecessary frightening of teams. The walls will be of iron

with the above firm he occupied high official positions in a dozen other business firms at Providence, and his death means a severe loss to the commercial and manufacturing community.

THE FREIGHT SITUATION.

The outlook in the freight market is decidedly more encouraging than last week, when it was necessary to look some distance ahead for something to tie to. While the grain rate at Duluth remains at $2\frac{3}{4}$ c, the feeling is firm, and chartering is very active. This has stiffened the ore rate so much that an advance to \$1 is expected to-day or to-morrow. The Marquette rate is still quoted at 80c, although a scarcity in the boats which cared to load there necessitated a payment, during the week, of 85c on several cargoes. From Escanaba the rate is still 55c to Ohio ports, but several charters to carry ore to Buffalo furnaces were made at 65c. Several season contracts have also been closed at 70c, a very encouraging feature. The Chicago corn rate continues steady at $1\frac{1}{2}$ c to Buffalo, with a disposition to take all the limited capacity that is offered.

Coal rates continue firm but the strength is not sufficient to justify any hope for an advance, although boats have no difficulty in finding cargoes. The rates remain 35c to the head of Lake Superior, 50c to Milwaukee, and 40c to Gladstone.

The Lake Michigan Car Ferry Transportation Co. has made another reduction in its St. Paul-Chicago rate, cutting it to 40c per cwt. on first class freight to meet the rates made by the Lake Superior steamboat lines. The all rail rate is 50c.

THE RECENT TORNADOES.

The lake fleet, by reason of the efficiency of the

NEWS AROUND THE LAKES.

BUFFALO.

MUCH DELAY IN THE ERECTION OF MICHIGAN STREET BRIDGE—THE DAMAGE TO THE ST. PAUL—FALSE REPORTS IN REGARD TO FUEL ABUSES.

Special Correspondence to The Marine Record.

BUFFALO, June 2, 1896.

Buffalo is the scene this week of one of the most unique strikes on record—a body of unemployed men being out, while those who have been working for more than a year are still contented. It is an effort on the part of the old union to get a hold on the grain shoveling here, which is controlled by Mr. James Kennedy. The leaders of the so called strike at first succeeded in creating an impression that some labor troubles really existed, but this soon wore off, although they called in a body upon the Mayor and asked for protection from the men who are quietly holding down their own situations.

Capt. Brown has had a tilt with the Coal Trade Journal lately. The Buffalo correspondent of that paper sent in a statement that the old abuses in vessel fuel were as bad as ever again. This was a queer proceeding at best, as the paper is supposed to be published in the interests of the coal shippers and to rush in with such a story was ungracious at the best. Someone sent Capt. Brown a paper and he wrote a contradiction of the story, asking that if it was published not to use his name, for the reason that he is getting into print lately more than is to his mind. The editor replied personally in a very uncomplimentary fashion, still trying to stick to the story. The fact is, as Capt. Brown took as his principal point that the vessel owners are not complaining of the fueling, which is quite enough to prove that there is nothing amiss in the business.

Hingston & Woods, the dredgers, are very full of business this season, with contracts all the way from the Sault to Oswego, including Erie and Conneaut, and now they are in for some they did not ask for. They were bondsmen for the waterworks tunnel contractor and are likely to have that to finish, as the job has got away from the workmen and the hole will fill up with water in spite of everything. Next the city has pulled them up for dumping to near the mouth of the harbor, and a set to is expected there.

But the worst limbo any contractor is in appears to be the predicament of the people who are building the bridge across Buffalo Creek at Michigan Street. Work was begun along in the winter and has gone on without stopping. Yet the only real progress made yet is the removal of the old bridge to a point below the street and the taking out of the old foundation. The cofferdams will not dump out, or if they do they fill up again before any new foundation can be put in. It looks as though the contractors would spend much more than they get out of the job and that snow would fly again before the new bridge was up.

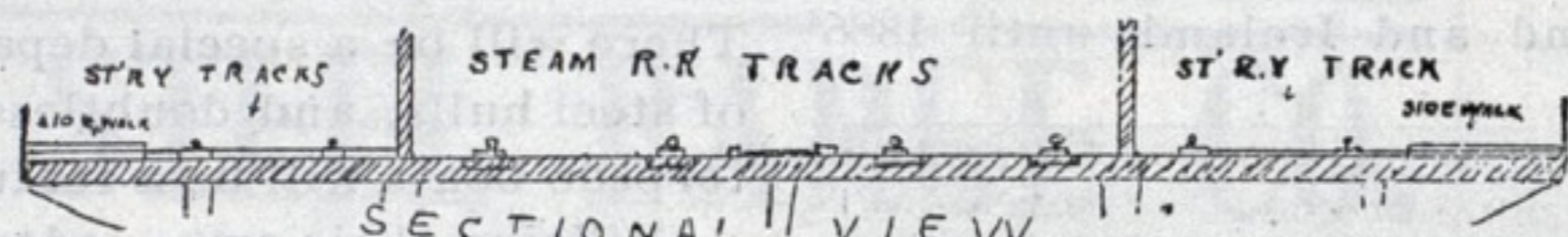
Some queer things happened in the collision between the V. H. Ketchum and the St. Louis last week. The St. Louis is undergoing a survey of her smashed stern at Tonawanda and is said to be in decidedly bad shape. The owners are unable to see how she could be struck in the stern by a vessel going in the opposite direction and then the other vessel be hit amidships by her own consort. Besides it is found that the steel arches of the St. Louis, instead of being strained and broken, are actually buckled several inches in the other direction, showing that the direction of the blow received was up instead of down.

Grain tallymen say that the cargoes run more even now than for a long time. Grain has been pouring in at a surprising rate, but the total giving out of winter wheat will cut down receipts now. Dealers say that there is not a cargo of it to be had anywhere, and they now depend on spring wheat and hard Kansas.

The struggle over package-freight traffic is still on. The abuses have been so great that the rail lines have taken a stand that they will not recede from, no matter what the shippers say. It has been the regular practice, year after year, to use the eastern rail-and-lake warehouses for storing flour, and now that a storage charge has been put on the flour shippers are accumulating their stuff at the receiving lake ports, for these roads are not in the new arrangement and do not charge storage. Lake men say that there is 1,000 tons of flour at Gladstone, most of it held there because there because there is no final destination for it yet, and to leave it here would be to incur a charge after 20 days. Milwaukee is apparently trying to boycott the lake lines. A demand has been made for a lower rate but this is in the interest of the local lines, and appears to have been made to help them.

The monthly custom-house report shows the heaviest grain movement on record, the total receipts for the season being 46,378,000 bushels. The highest previous year shows 33,638,000 bushels. This was in 1892, and only three seasons have exceeded 30,000,000 bushels. There was only a fraction over 24,000,000 bushels to the first of June last season. The great excess is in wheat and oats, both being well towards three times as much as last season to date.

If lumber would only start there would be a good movement all along the line, but it is about as dead as



THE SUPERIOR-DULUTH BRIDGE.

The Sectional View above shows the arrangement of railroad and street car tracks and sidewalks.

sheeting. The entire width of the bridge will be about 58 feet 6 inches. The middle or railway section is 26 feet between trusses. Outside of the steam railway portion of the bridge upon either side is the roadway and sidewalk for teams and foot passengers. Each of these outside portions, one for going and one for coming, is 13 feet wide, of which 9 feet is devoted to the road and 4 to the sidewalk. The street railway tracks are to be laid in the center of the roadways.

DEATH OF CAPT. C. C. BLODGETT.

Capt. C. C. Blodgett died Sunday at his home, No. 56 Hastings street, Detroit, after two weeks' illness, the result of a cold contracted two weeks previous, while in Cleveland. Capt. Blodgett was 68 years old, having been born at Conneaut, O., in 1828. When 15 years old he began sailing on the lakes, and followed the calling for more than forty years. He secured interests in several vessels, and was associated with Capt. Eber Ward in a number of enterprises. One of his vessels was the old Seabird, which ran to Lake Superior. Capt. Blodgett accumulated considerable property, and has for some years remained ashore and contented himself with its management. His wife survives him, as well as four daughters—Mrs. Edwin W. Smith, Mrs. Wm. Craig, Misses May M. and Adelaide Blodgett—and two sons, Messrs. Ralph and Charles. The funeral services were held at the family residence on Tuesday afternoon.

HENRY C. CRANSTON DEAD.

Henry C. Cranston, one of the most eminent and successful business men of Providence, R. I., and president of the American Ship Windlass Co., well known on the west lakes, died suddenly at his home in Providence on Wednesday of last week, fault of a stroke of apoplexy, at the age of 64 years. Besides his connection

Weather Bureau and the reliance placed upon it, suffered very slightly from the late severe storms which wrought such disaster elsewhere. The marine losses of the United States occurred chiefly on the Mississippi River, where the devastation wrought in the neighborhood of St. Louis was something terrible. The total losses, according to the Waterways Journal, printed at St. Louis, number fifteen craft, the City of Cairo, Arkansas City, Bald Eagle, Libbie Conger, City of Quincy, J. J. Odil, Dolphin No. 2, and Harvester, tow boats, H. L. Clark, S. B. Wiggins, Napoleon, Milliken, Wm. Christy, ferry boats, George A. Madill, and Henry Sackman, transfer boats; and the Austria, a steam pleasure yacht purchased only a few months ago by Capt. Wm. Zuite from the Marine Iron Works, Chicago.

The list of boats that can be saved is as follows: City of Providence; City of Vicksburg, almost a wreck; City of Monroe, stacks and part of cabin gone; Pittsburg, cabin gone; Belle of Calhoun, sunk in water up to her cabin; Harbor Boat, pilot house gone, part of cabin demolished, and stacks broken off; also tugs S. C. Clubb, Reserve No. 2, and Baton Rouge Belle. The losses total up about \$380,000 on floating property. The loss entire to St. Louis marine will closely approach \$1,000,000.

MARINE RECORD DIRECTORY.

THE MARINE RECORD DIRECTORY of MASTERS and ENGINEERS is now on sale. It is an attractive book of about fifty pages, of convenient size for the pocket. The names of ships are arranged alphabetically, with their masters and engineers, and the names of latter are also arranged alphabetically, with the boats on which they are engaged. Sent to any address on receipt of 25c.

A dredge is at work deepening the harbor at Peshigo, Wis.

ever. Considerable of it is going down the river to Tonawanda, but it is largely the forwarding, and Buffalo is holding back with all its might.

It ought to be given out as generally as possible that the water in the Niagara River is better than it was expected to be, and is still improving, so that there is now no difficulty in getting down on 13 feet. So far there has not been a single report of anything striking between here and Tonawanda this season, which is a remarkable record. So much difficulty was looked for that extra caution has been taken.

Capt. Killoran is back from Duluth, where he went to look after the repairs of the steamer Moran at Duluth. It is expected that she will be out again by the end of the week or early next week at the farthest.

The schooner A. L. Andrews appears to have run considerable risk by going out with a coal cargo when she was leaking. She got up as far as Erie and then ran under Long Point. The leak grew worse and she came back with her cargo, not feeling safe with a steam pump aboard.

JOHN CHAMBERLIN.

DETROIT.

SHORT SKETCH OF THE NORTHERN STEAMSHIP CO.'S NEW REPRESENTATIVE—CHANGE OF SECRETARIES FOR S. F. HODGE & CO.

Special Correspondence to The Marine Record.

DETROIT, June 3.

Robert S. Hart, who assumes control of the big Bissell warehouse for the Northern Steamship Co., which took control on June 1, has had a long experience in matters pertaining to marine. From 1875 to 1880 Mr. Hart was messenger and billing clerk with the D. G. H. & M. Ry., and on leaving that road he went with Brady & Co., of Detroit, at the time they did business for the old Lake Superior Transit Co., remaining there six years.

The Lake Superior Co. then took an office of their own at Detroit, and Mr. Hart went with them, under J. C. Whiting as manager. He remained with them during 1886 and 1887, and in the spring of 1888 went to the Sault to take charge of the Union Dock & Coal Co.'s office, which position he held eight years, leaving it to assume his present place.

Mr. Hart has one of the finest and largest warehouses on the chain of lakes to look after, and on assuming his new duties is fortunate in finding everything in the most perfect order.

Several times this spring the boats passing Amherstburg, especially those with rafts, have carried away some of the ranges at or near the Limekiln Crossing, and gone on to Lake Erie without reporting the matter. The boats always pass near enough to the town to give notice in some way and it is a breach of sailor etiquette to neglect giving proper notice at so convenient a point, when the ranges are of such importance, of course supposing they are aware of what has been done, which at that point some one is almost sure to be.

Capt. Alex Ruelle has again been visited with misfortune, his tug, the C. A. Lorman, the finest of his harbor fleet, succumbing to an open-lake storm on Lake Erie, and going ashore, together with her raft, some four miles south of the town of Leamington, Ont., near Point Pelee. The tug carried no insurance of any kind, and the cost of raising her with pontoons and repairing her will be \$3,000 or more, supposing the wreckers are able to at once release her. The tug was rated A1 and valued at \$9,000.

The Detroit Dry-Dock Engine Works has placed the new steamer Aregon's machinery in her, and she will be ready about the first of July to go into commission. The 35-ton engine was hoisted high in air over her hull and lowered bodily into its place.

The river steamer Wyandotte is now making two daily trips to Grosse Isle.

The Detroit, Belle Isle and Windsor Ferry Co.'s banner boat, the Pleasure, will go into commission on June 10.

Forwarding freights along the Lake Huron shore have been exceptionally good all spring, the bulk being enjoyed by John Stevenson, and Grummond's and Bissell's dock has have a fair share of through freight and has received large quantities for Detroit. The D. & C. Line has always a fair amount.

Gen. Pass. Agent A. A. Schantz, of the D. & C. Line, has adopted a novel and "catchy" advertising scheme for this season on their boats. It consists of a letter with a pamphlet enclosed, purporting to be written by a young man on board one of their steamers, and is causing much attention, and brings replies from places wherever sent.

The old and well-known firm of Samuel F. Hodge & Co. has changed secretaries. Joseph Mayworm, the former secretary, has resigned, and Wm. M. Kay, for ten years in the employ of the firm as a bookkeeper, takes his place. The new secretary is an affable and pleasant gentleman, and has the details of the large business thoroughly under his control. The firm reports as recent work done the following:

New wheels—Propellers: Whitaker, Gettysburg, Penobscot, L. L. Lyon, Valerie, Marinette, and steam-yachts Azelia and Dream.

Engines—A triple-expansion, 18, 30 and 50 by 40 inches, built for tug S. M. Fischer, under construction at Craig's yard. Triplex for yacht Enquirer, 10½, 17, and 27 by 16 inches. On June 8, Hodge & Co., will

ship two triple-expansion engines for the New Orleans Pumping Plant, of 13, 17, and 34 by 24 inches each.

HUGH M. McCORMACK.

CHICAGO.

THE STEAMER ALVA GETS MIXED UP WITH A BRIDGE—THE ALLEGHANY IN A SIMILAR SCRAPE.

Special Correspondence to The Marine Record.

OFFICE OF THE MARINE RECORD, CHICAGO, June 4.

The excursion business on the lake front has now fairly begun and the correct thing to do is to take a ride day or night.

Capt. John Maurice adjusted the compass of the steamer J. C. Hurd on Saturday.

The Bradley Line steamer Alva ran into a bridge at South Chicago on Monday and damaged her port quarter and carried away a portion at the draw. The accident occurred through parting of a head line just as the steamer was going through the draw. Captain Wysoon did all that was possible to avoid damage and although a number of people were scared the repairs will not amount to much.

James A. Calbick & Co., chartered the steamer W. P. Ketcham and consort George B. Owen for wheat to Kingston at 3c.

Grain freights are fine on the basis of 1½c on corn 1¼c on oats to Buffalo—good demand.

A despatch from Harbor Springs, Mich., dated May 31st, from Captain E. Mullen, says as follows: Schooner Commerce here little damaged; taken off beach yesterday.

Mr. John Maurice, expert on compass adjustments at the port finds all that he can attend to, as there seems more attention paid to correcting compasses than ever before.

The steamer Alleghany, light, going down the river Monday morning, ran into the North side approach of Wells street Bridge and knocked away some stone work and iron railing and a lamp post. The steamer's upper works forward were badly damaged.

The Independent Tug Line's tug Welcome arrived here Sunday from Muskegon with a floating dry-dock which had been used for several years by the Muskegon Boom Co. The dry-dock was formerly the hull of the steamer B. F. Wade and is 146 long 35 feet wide and will take in boats drawing 11 feet. The Independent Tug Line will use the dock for docking their tugs.

The Goodrich Transportation Co.'s steamer Virginia arrived here Tuesday morning from Manitowoc and went into the excursion business Wednesday morning between Chicago and Milwaukee. The Virginia has been put in splendid condition for her season's work, and no expense has been spared to make her one of the fastest, most seaworthy and luxuriantly furnished steamers on the lakes.

THOMAS WILLIAMS.

DULUTH AND SUPERIOR.

CONSPIRACY TO OUST A LIGHTKEEPER—MILL MANAGERS STILL COMPLAINING.

Special Correspondence to The Marine Record.

DULUTH, June 2.

The mill managers of Superior and Duluth are anything but pleased over the lake freight situation. They claim that they are discriminated against, inasmuch as their tonnage costs them more proportionately than the mills in other parts. They object vigorously to the alleged practice of the railway line boats, some of which have been handling wheat at 2½c per bushel and are at the same time charging Duluth and Superior mills 20c per cwt. on flour to New York. The 2½c rate on export wheat, figured down to a flour basis, is only 15c per cwt., when the rates east of Buffalo and handling charges are taken into account. This is a discrimination against the local mills of 5c per cwt., or 10c per barrel. The discrimination is nothing new, but the amount of it is larger than ever before.

It is stated that parties owning property in Allouez Bay contemplate cutting off the little peninsula which divides Allouez Bay from the Nemadji River. If this improvement should be made, it would be of great advantage to the coal docks and other enterprises in that locality. The mouth of the Nemadji is very close to the natural entry, and with the strip of land cut off the river's mouth would be just a little north of the Northern Pacific Railroad bridge, making it convenient for boats to go from the river into Allouez Bay without first passing through Superior Bay.

The rebuild of Northern Pacific merchandise dock at Duluth, which was destroyed by fire some time ago, is nearing completion.

The work of dredging the channel on the west side of the Duluth & Winnipeg ore dock is about finished.

The logs on the Brule River have all been towed into the lake, and the stream is now cleared from end to end. The water, which has been very high at times this year has receded and the stream is now nearly down to its normal condition.

Some days ago some individual forwarded to the chief inspector of harbor lights, at Detroit, a letter to the effect that Capt. J. H. Peabody, of the East End, who had charge of the beacon lights along the natural entry and Quebec pier, was not attending to business,

the lights being out half the time. The letter was signed by James McGrath, who asked for the release of Capt. Peabody, so that he might be appointed to the place. The letter was returned to Mr. Peabody with a request for an explanation. Mr. Peabody was at a loss to know who McGrath was, and after searching the directory from end to end and visiting every postoffice in the city the fact was disclosed that no such man lived in the city. As far as can be learned it was a put up job by some person who desired to oust Mr. Peabody. Mr. Peabody at once made inquiries among the tug and lake captains as to the condition of the lights, and in every instance they were reported satisfactory. He then received the signatures of every captain of the Inman Line to the effect that the lights were in good condition and that not the least fault could be found with them. This he forwarded to Detroit.

CLEVELAND.

THE CANAL BOAT FLEET MAKES A GOOD RECORD—STEAMBOAT MAN BECOMES A RAILROADER.

CLEVELAND, June 4.

THE RECORD regrets to announce the loss to steamboat circles of Harry R. Rogers, who has been general freight agent for the Cleveland & Buffalo Transit Co. since its organization and before that time represented the interests of the Soo Line in this territory. Mr. Rogers has just accepted the position of commercial freight agent for the Cleveland Terminal & Valley Ry. Co., under General Traffic Manager L. Rush Brockenbrough, who seems disposed to give this line one of the most efficient traffic organizations known in Cleveland. Mr. Rogers is succeeded with the C. & B. Line by Mr. John Evans, with the title Acting General Freight Agent.

Mr. J. C. Gilchrist has completed the purchase hinted at in the last week's RECORD of the schooners Moonlight and H. A. Kent, lately released from the beach at Chocelay River by Capt. Jay Hursley, of Sanit Ste Marie. The purchase price has not been made public.

Several concerns in the city have been receiving, during the week, samples of rubber gaskets from the Goodsell Packing Co., of Chicago, which are pronounced of excellent quality.

Messrs. F. M. Kirk and James A. Curtis have opened offices in the New England Building on Euclid avenue, and are conducting a general wholesale business in coal and coke, under the name of F. M. Kirk & Co. The gentlemen are well known in both railroad and marine circles and we wish them hearty success.

The first fleet of steel canal boats of the Cleveland Steel Canalboat Co. for this season arrived in New York May 13. It consisted of the steam barge Alpha with five consorts, all loaded to a draft of 5 feet, which is the maximum now practicable in the Erie Canal. The fleet left Cleveland May 3 at 1 a. m., arrived at Buffalo May 4 at 8 a. m., left Buffalo May 4 at 6 p. m., arrived at New York May 13 at 8 a. m.; lost 10 hours at Buffalo on account of ice in the harbor, 4 hours at Brockport cleaning fires, 4 hours at Troy waiting for teams through single locks; total, 18 hours lost time. Actual running time from Cleveland to New York, 9 days, 13 hours; Cleveland to Buffalo, 31 hours; Buffalo to Troy, 5 days, 20 hours; Buffalo to New York, 7 days, 12 hours. The cargo included 653,000 lbs. of nails for export to Japan; 375,000 feet of lumber for New York; 10 tons' paraffine wax for Germany, and a miscellaneous cargo for New York. The westbound cargo will consist chiefly of sugar for Detroit, Toledo, Cleveland and the Southwest.

VISIBLE SUPPLY OF GRAIN.

As compiled for THE MARINE RECORD by George F. Stone, Secretary Chicago Board of Trade, May 30, 1896:

CITIES WHERE STORED.	WHEAT. Bushels.	CORN. Bushels.	OATS. Bushels.	RYE. Bushels.	BARLEY Bushels.
Albany		20,000	100,000		
Baltimore	509,000	882,000	209,000	29,000	
Boston	600,000	119,000	5,000		
Buffalo	1,132,000	465,000	748,000	127,000	271,000
" afloat					
Chicago	14,751,000	4,377,000	1,694,000	348,000	10,000
" afloat					
Cincinnati	9,000	2,000	23,000	1,000	22,000
Detroit	140,000	14,000	19,000		2,000
" afloat					
Duluth and Superior	8,318,000		287,000	206,000	145,000
" afloat					
Indianapolis	34,000	17,000			
Kansas City	1,067,000	65,000	31,000	29,000	
Milwaukee	547,000	2,000		391,000	48,000
" afloat					
Minneapolis	17,221,000	66,000	501,000	67,000	24,000
Montreal	461,000	38,000	435,000	6,000	51,000
New York	1,937,000	1,551,000	1,430,000	75,000	2,000
" afloat	144,000		82,000	8,000	
Oswego		22,000			2,000
Peoria	15,000	3,000	123,000	2,000	
Philadelphia	306,000	98,000	112,000		
St. Louis	603,000	118,000	43,000	2,000	
" afloat					
Toledo	287,000	88,000	17,000	118,000	
" afloat					
Toronto	64,000	13,000	92,000		21,000
On Canal	1,288,000	33,000	1,385,000		102,000
On Lakes	907,000	912,000	961,000	25,000	157,000
On Mississippi			6,000		
Grand Total	50,340,000	8,905,000	8,303,000	1,434,000	887,000
Corresponding date 1895	52,229,000	10,763,000	8,626,000	136,000	100,000

THE PRESIDENT'S VETO.

The following message was sent to the House by President Cleveland last Friday afternoon, and is printed here as a matter of record:
To the House of Representatives:

I return herewith without approval House bill number 7,977, entitled "An act making appropriations for the construction, repair and preservation of certain public works on rivers and harbors and for other purposes."

There are 417 items of appropriation contained in this bill, and every part of the country is represented in the distribution of its favors.

It directly appropriates or provides for the immediate expenditure of nearly \$14,000,000 for river and harbor work. This sum is in addition to appropriations contained in another bill for similar purposes amounting to a little more than \$3,000,000, which have already been favorably considered at the present session of Congress. The result is that the contemplated immediate expenditures for the objects mentioned amount to about \$17,000,000.

A more startling feature of this bill is its authorization of contracts for river and harbor work amounting to more than \$62,000,000. Though the payments of these contracts are in most cases so distributed that they are to be met by future appropriations, more than \$3,000,000 on their account are included in the direct appropriations above mentioned. Of the remainder nearly \$20,000,000 will fall due during the fiscal year ending June 30, 1898, and amounts somewhat less in the years immediately succeeding. A few contracts of a like character, authorized under previous statutes, are still outstanding; and to meet payments on these more than \$4,000,000 must be appropriated in the immediate future. If, therefore, this bill becomes a law, the obligations which will be imposed on the government, together with the appropriations made for immediate expenditure on account of rivers and harbors, will amount to about \$80,000,000. Nor is this all. The bill directs numerous surveys and examinations which contemplate new work and further contracts, which portend largely increased expenditures and obligations.

There is no ground to hope that in the face of persistent and growing demands the aggregate of appropriations for the smaller schemes not covered by contracts will be reduced or even remain stationary. For the fiscal year ending June 30, 1898, such appropriations, together with the installments on contracts which will fall due in that year can hardly be less than \$30,000,000; and it may be reasonably apprehended that the prevalent tendency toward increased expenditures of this sort and the concealment which postponed payments afford for extravagance, will increase the burdens chargeable to this account in succeeding years.

In view of the obligation imposed upon me by the constitution, it seems to me quite clear that I only discharge a duty to our people when I interpose my disapproval of the legislation proposed.

Many of the objects for which it appropriates public money are not related to the public welfare, and many of them are probably for the benefit of limited localities, or in aid of individual interests.

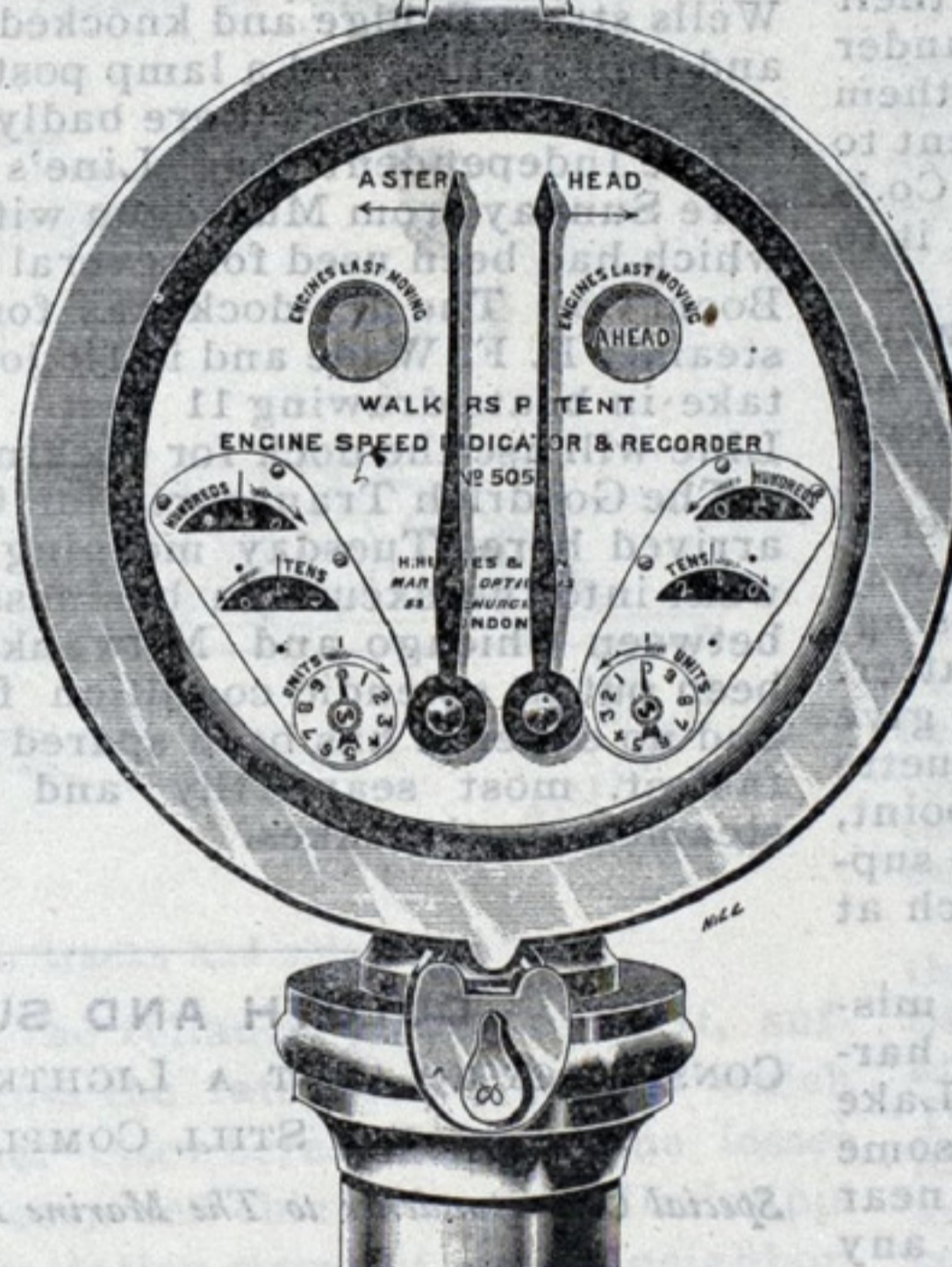
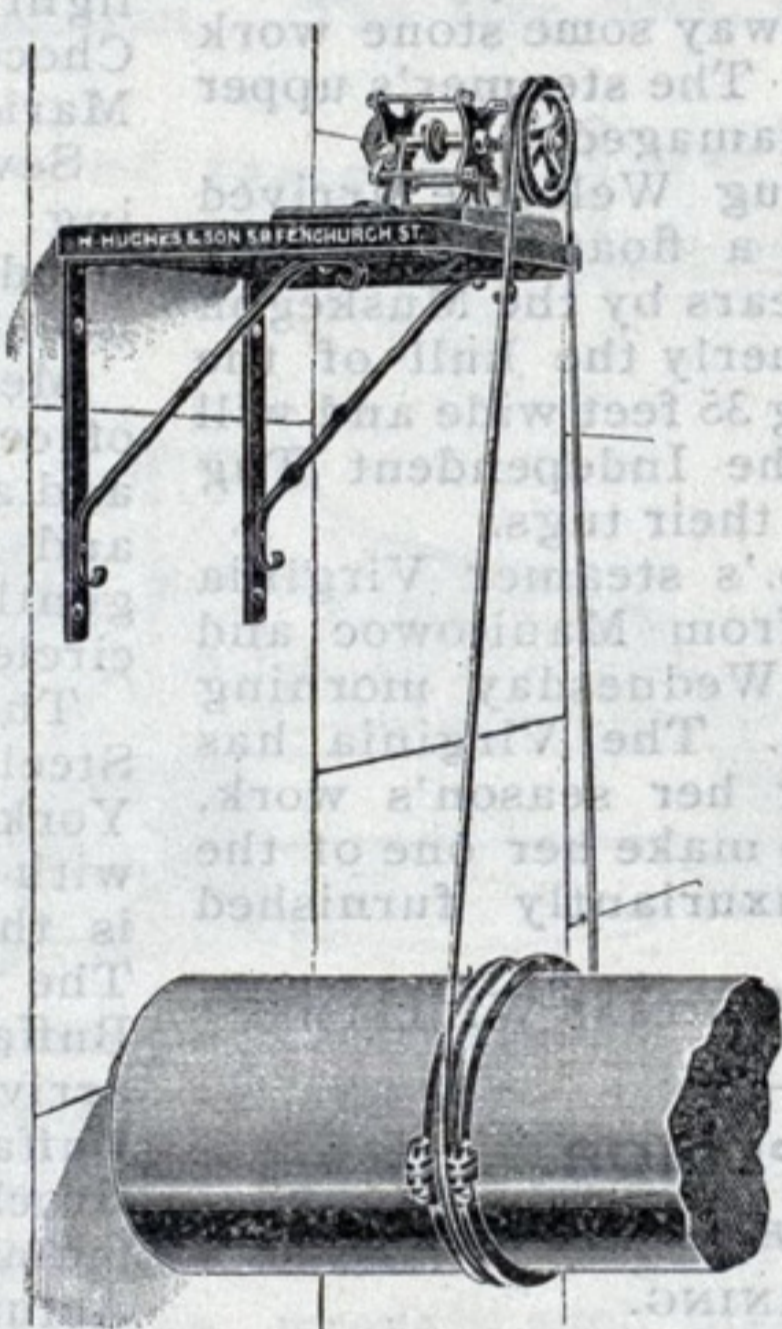
On the face of the bill it appears that not a few of these alleged improvements have been so improvidently planned and prosecuted that after an unwise expenditure of millions of dollars, new experiments for their accomplishment have been entered upon.

While those entrusted with the management of public funds in the interest of all the people can hardly justify questionable expenditures for public works by pleading the opinions of engineers or others as to the practicability of such work, it appears that some of the projects for which appropriations are proposed in this bill have been entered upon without the approval or against the objections of the examining engineers. I learn from official sources that there are appropriations contained in the bill to pay for work which private parties have actually agreed with the government to do, in consideration of their occupancy of public property.

Whatever items of doubtful propriety may have escaped observation, or may have been tolerated in pre-

vious executive approvals of similar bills, I am convinced that the bill now under consideration opens the way to insidious and increasing abuses, and it is in itself so extravagant as to be especially unsuited to these times of depressed business and resulting disappointment in government revenue. This consideration is emphasized by the prospect that the public treasury will be confronted with other appropriations made at the present session of Congress, amounting to more than \$500,000,000. Individual economy and careful expenditure are sterling virtues which lead to thrift and comfort. Economy and the exaction of clear justification for the appropriation of public moneys by the servants of the people are not only virtues, but solemn obligations.

To the extent that the appropriations contained in this bill are instigated by private interests and promote local or individual projects, their allowance cannot fail to stimulate a vicious paternalism and encourage a sentiment among our people, already too prevalent, that their attachment to our government may properly rest upon the hope and expectation of direct and especial favors, and that the extent to which they are realized may furnish an estimate of the value of governmental care. I believe no greater danger confronts us as a nation than the unhappy decadence among our people of genuine and trustworthy love and affection for our government as the embodiment of the highest and best aspirations of humanity and not as the giver of gifts, and because its mission is the enforcement of exact justice and equality, and not the allowance of unfair favoritism.



I hope I may be permitted to suggest at a time when the issue of government bonds to maintain the credit and financial standing of the country is a subject of criticism, that the contracts provided for in this bill would create obligations of the United States amounting to \$62,000,000, no less binding than its bonds for that sum.

GROVER CLEVELAND.

Executive Mansion, May 29, 1896.

AN ERROR.

Subscribers who have received copies of THE MARINE RECORD DIRECTORY of Masters and Engineers will please cut out the following and paste it over lower part of Page 11:

SCHOONER.

Abbie
Aberdeen
Active
Adriatic
Albany
Aldrich, Wm.
Algeria
Alleghany
Aloha
Alta
Alverson, H. D.
Amboy
Amsden, C.

MASTER.

Halverson, —
Coles, Frank
Emery, J. H.
Parker, H. T.
Scott, A. B.
Johnson, Henry
Elnen, Martin
Smith, C. O.
Elliott, Wm.
Huntton, Horace
Landgraf, Wm.
Williams, W. R.
Fairweather Chas

The Northern Steamship Company has issued a neat little pamphlet containing much information about the head of the lakes and the tours of the lakes. It contains half-tone cuts of the steamers North West and North Land.

AN ENGLISH TELL-TALE.

A few weeks ago we illustrated and described Mr. Frank Morrison's tell-tale. His device will not suffer by a description of a newly invented English tell-tale, as the Cleveland inventor has accomplished practically the same results by a much easier method, and the means for operating are much more simple and economical. Mr. Morrison's tell-tale is more serviceable, also, in that it can be seen at night without difficulty.

The instrument described below and herewith illustrated, is known as Walker's Engine-Speed Indicator and Recorder. It has been, like the Morrison tell-tale, invented and brought out to provide what has long been needed—a simple and reliable means of indicating to the officer on the bridge the direction and speed of the main shaft; and as it conveys to him both ocular and aural demonstration, should there have been any misunderstanding in the engine-room of the order given, he can at once take the requisite steps for rectifying the error, and so avert any impending disaster. The instrument consists of a bridge indicator, an engine-room contact maker, and a set of battery cells in case.

The bridge indicator, as shown in the illustration, is mounted on a brass pillar stand, similar to the ordinary telegraph. The dial is fitted with two main pointers, one for ahead and one for astern. These respectively beat for every revolution of the engine, and at the same time push the small shutter "ahead" or "astern" into its place in one of the small openings in the dial. Two bells, of a deep and shrill tone respectively, are also fitted inside the dial head, indicating by sound the movement of the engine. A switch is fitted to each of

these bells, enabling it to be turned off if not required. A main switch is also provided on the front of the stand, by which the indicator can be entirely shut off when not wanted. The dial is also fitted with six recording indices, three on each side, to record the total number of revolutions ahead or astern made by the engine in carrying out the evolutions required. These can be readily set back to zero if required.

The engine-room contact instrument is of very simple construction and arrangement, fitted with a pulley wheel proportioned to the cut pulley fixed on the main shaft, from which it is driven by a band or strap. This rotates by means of the gearing shown, a spindle carrying a two part commutator having brushes so arranged that each rotation of the shaft ahead or astern transmits an electrical impulse through its respective brush to the corresponding needle and bell of the bridge indicator. A metal-lined casing covers the engine-room contact instrument, and effectually protects it from all dirt and injury.

The battery is an ordinary Leclanche one of 12 or more cells, enclosed in a suitable case, and is readily kept in working order.

The advantages of this new instrument will be evident to and appreciated by every navigating officer in charge of a steamship when working ship in close quarters.

INLAND LLOYD'S SUPPLEMENT.

The Inland Lloyd's supplement for June was issued last Saturday by Capt. Daniel McLeod, manager. It contains the new enrollment of the steamers City of Buffalo, A1, \$250,000; Bloomer Girl, A1, \$12,000; Edna G, A1, \$35,000; Governor Morton, A1½, \$5,000, built by the Marine Iron Works, Chicago, in 1892, for the City of Buffalo; George N. Orr, A1, \$200,000; schooners Armenia, A1*, \$85,000; Connelly Bros., A1*, \$40,000; George E. Hartnell, A1, \$125,000; barges Mikado, B1, \$10,000; and Tycoon, B1, \$10,000, the two last named being the lighters built by James Davidson, Bay City, for his own use. In addition to these the supplement contains about sixty postponed classifications and valuations. Among these is the schooner Sunrise, which was lost May 21, her valuation and rating having been raised during the early part of the month from B1, \$5,000, to A1½, \$6,000.

The United States Deep Waterways Commission is preparing tables, for as many years back as possible, showing the data of the closing of the different bays in the United States and Canada.

THE SCHOONER YACHT IDLER.

Now that yachting on the lakes is to be such a feature of local and international summer sport, it is interesting to look over some of the crack yachts which will take part in some of the principal regattas this year.

The Idler was built in 1864 at East Haven, Conn., on the lines laid down by a naval architect who has since designed some of the winners in the international ocean races. She has always been noted for her speed, and won honors in a number of races on the coast. Her abilities are best shown off in heavy weather and on June 10, 1869, at the 24th annual regatta of the New York Yacht Club, she won in a strong wind over five schooners and three sloops. The following year, on June 14, she again won the race, leaving eleven schooners astern.

On June 8, 1876, the Idler once more proved conclusively that there was nothing in a name by sailing over the New York Yacht Club's course in 3 hours, 50 minutes and 40½ seconds, defeating all competitors. On

of canvas, and she has been known in tolerably heavy weather to do better than 15 miles per hour.

In 1890 the Idler was thoroughly rebuilt, but this work was superintended by the gentleman mentioned above, who required that each new frame should be patterned precisely upon the old frame which it replaced, so that the lines of the yacht were not altered in the slightest degree. She has not sailed a great deal since her rebuild, and has been defeated once or twice in drifting matches, but those who know her best are full of faith in her, and are anxious to see her come to Lake Erie this year and try conclusions with even so fast a sailer as the steel yacht Priscilla. It is not impossible that she may come, as although her present owner, Mr. John Cudahy, of Chicago, does not expect at present to fit her out, he has put her provisionally on the market, and she may get into somebody's hands who will try for the Toledo purses.

The hull of the Idler measures 106 feet over all, with 94 feet load water line, by 22 feet 4 inches beam. She is

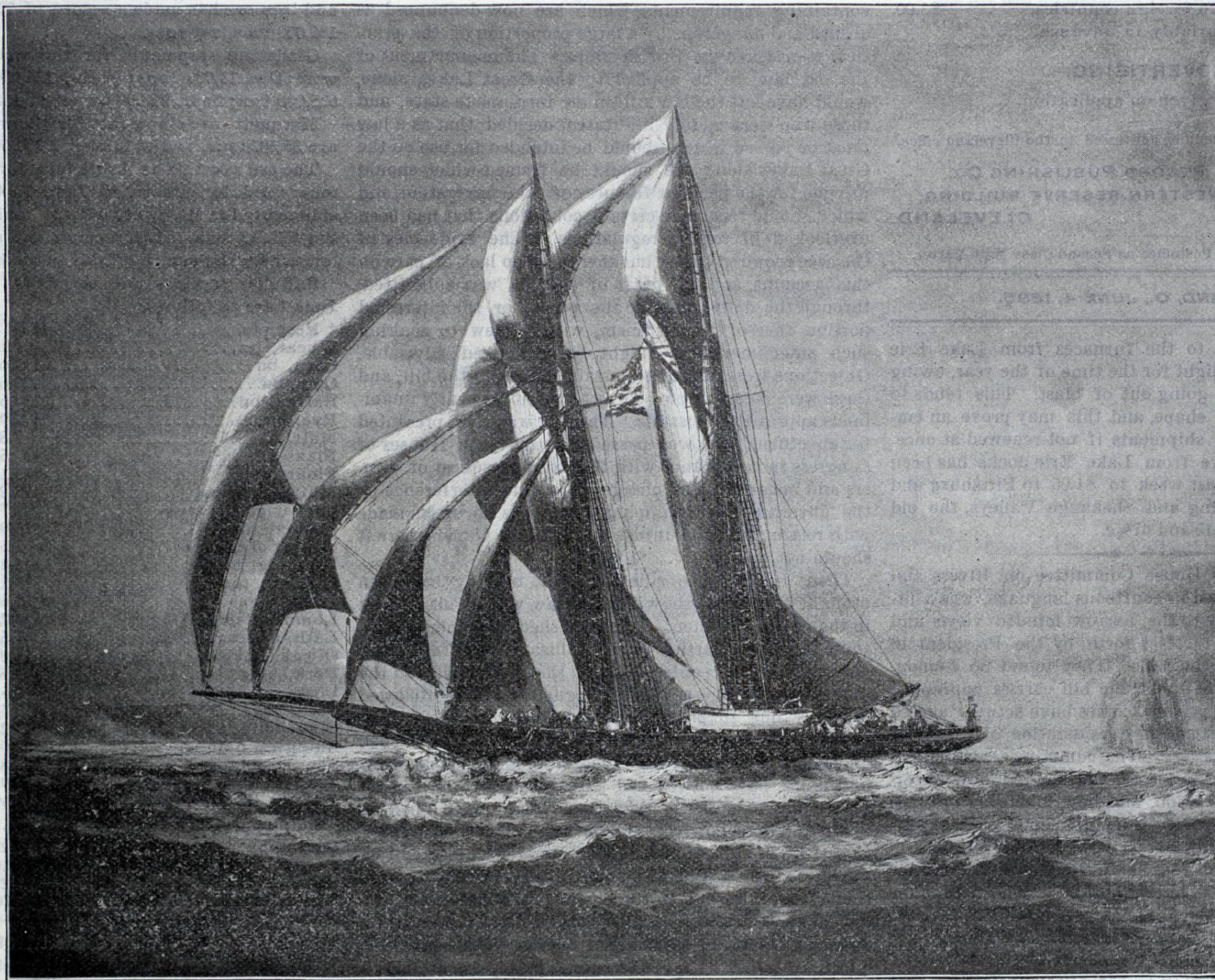
NEWLY ENROLLED TONNAGE.

Following is a list of lake vessels to which official numbers and signal letters have been assigned by the Commissioner of Navigation, for the week ending May 23:

Official No.	Rig.	Name.	TONNAGE.		Where Built	Home Port
			Gross.	Net.		
141,430	Slp.	Lena L.	10.51	10.57	3 Mile Bay	Cape Vine't
136,547	St. s.	E.W Oglebay	3,666.19	3,019.01	W. Bay City	Detroit
86,350	St. s.	Geo. N. Orr	2,872.71	2,412.88	Chicago	Chicago
136,551	St. y.	Elk*	9.95	6.77	Cleveland	Buffalo

* Built in 1893.

The Richelieu & Ontario Navigation company's boats began their tri-weekly trips between Montreal, Toronto and Hamilton on June 1. From the 15th of June until the end of the season the trips will be made daily. The same four steamers will be engaged in this service as were engaged last year, namely, Spartan, Corsican, Passport and Algerian.



THE SCHOONER YACHT IDLER, OF CHICAGO.

July 27 of the same year she won the Breton's Reef challenge cup, defeating the America, Wanderer, Tidal Wave, and Countess of Dufferin, and in Sept. 19, 1876, won over the Rambler, Peerless, Meta, Gracie and Madcap. One year later, or on September 4, 1877, the Idler won the Cape May cup, defeating the Dreadnaught, Rambler and Vesta.

After this the Idler lay in New York harbor for some time, and was announced to be for sale. One of Chicago's best known vessel men, who is yet a most sincere lover of sport, and who is thoroughly competent to judge of a vessel's condition, went to New York to look at her, and finally effected her purchase. She was taken to Chicago and was matched against the Canadian schooner Oriole, which she defeated, although the Oriole was no mean competitor. Two years later she again outsailed the Oriole and Countess off Chicago. As will be seen by the engraving she carries a quantity

flush decked, but has ample cruising accommodations, consisting of a large salon and four private state-rooms, besides store-rooms, closets, bath, etc. Forward is the galley, well, pantry, ice-box, etc. The forecabin is also a roomy compartment, and is provided with berths for a crew of eight men.

When the Idler was rebuilt she was entirely renewed, except for her Georgia pine deck, which is all that remains of the original yacht. She has two full suits of canvas, and her cruising fitout consists of boats and guns. Her extra racing canvas includes mainsail, club gaff topsails, maintopmast staysail, and balloon sails.

Gen. Supt. S. I. Kimball advertises elsewhere in this issue that he receive proposals for furnishing annual supplies for the U. S. Life Saving Service for the year ending June 30, 1897.

WORTH KNOWING.

It is worth knowing by people buying windlasses that in the Providence windlass, as made by the American Ship Windlass Co., of Providence, R. I., the wild cat can be locked to and unlocked from the windlass in one-tenth of the time of any other machine. This is caused by the fact that in locking the wild cat it is only necessary to move the locking wheel one-eighth of one revolution, whereas with the other styles it is necessary to make three or four complete revolutions of the hand wheel. This is very important, as in an emergency it is often necessary to let go the anchor immediately to prevent collision with other vessels, or prevent going ashore. This is only one of the many advantages which this machine has over other styles, and it will be found in practical use that every necessity and convenience has been provided for in the Providence windlass by a thorough study and test of forty years.



(ESTABLISHED 1878.)

PUBLISHED EVERY THURSDAY BY

THE MARINE RECORD PUBLISHING CO.,

[INCORPORATED.]

GEORGE L. SMITH, President,

CLEVELAND,
WESTERN RESERVE BUILDING,
FOURTH FLOOR.CHICAGO,
ROYAL INSURANCE BUILDING,
ROOM 308.

C. E. RUSKIN,	MANAGER.
W. L. MCCORMICK,	EDITOR.
THOMAS WILLIAMS, Chicago,	ASSOCIATE.

SUBSCRIPTION.

One copy, one year, postage paid,	\$2.00.
One copy, one year, to foreign countries,	\$3.00.
Invariably in advance.	

ADVERTISING.

Rates given on application.

All communications should be addressed to the Cleveland office.

THE MARINE RECORD PUBLISHING CO.,
FOURTH FLOOR, WESTERN RESERVE BUILDING,
CLEVELAND.

Entered at Cleveland Postoffice as Second-Class Mail Matter.

CLEVELAND, O., JUNE 4, 1896.

SHIPMENTS of ore to the furnaces from Lake Erie docks are unusually light for the time of the year, owing to so many furnaces going out of blast. This tends to put the docks in bad shape, and this may prove an embarrassing feature of shipments if not renewed at once. The rail freight on ore from Lake Erie docks has been reduced during the past week to \$1.05 to Pittsburg and 62½¢ to the Mahoning and Shenango Valleys, the old rates having been \$1.15 and 67½¢.

THE report of the House Committee on Rivers and Harbors, while couched in courteous language, was a fitting, a forceable reply to the narrow minded views and misstatements of the fact set forth by the President in his message vetoing the bills. They found no foundation for his statement that "the bill carries appropriations for work which private parties have actually agreed with the government to do in consideration of the occupancy of public property." The committee also pulled the President's figures to pieces, and showed how superficial was his examination, and how much his motives were inspired by prejudice. The immediate cash expenditure, instead of being \$17,000,000, is but \$12,621,000 for the coming fiscal year; and the whole bill carries with it not \$62,000,000, but \$59,616,000. The maximum sum that can be expended in one year is \$16,612,000, and not \$20,000,000 as the President stated. The average appropriations for the past six years have slightly exceeded this, being \$16,700,000, while including the present bill and the two others to be passed in this century the average amount for the six years will be only \$13,000,000. This is a sufficient argument against the President's charges of extravagance, and in favor of the contract system. It is also shown that in condemning expenditures under previous appropriations as wasteful because projects have called abandonment, the President acted with undue haste, as it is pointed out that these so-called abandonment have been only such modifications of original plans as would better provide for the growing commerce of the port, and that had the original project been carried out they would still have been much benefit. Nobody questions the honesty of the President's views on the subject, but it would be humiliating to anyone less conceited to see his vetoes treated with the contempt which they received in so many instances at the hands of the two Houses of Congress. The vote insisting on the passage of the bill was 220 yeas to 60 nays in the House, and 56 yeas to 5 nays in the Senate. The bill is therefore now a law, and the engineers, who have been waiting for the word, will resume work with renewed vigor, on the great projects provided for.

THE WHITE LAW NOT AT FAULT.

The Detroit Journal printed some comment on the Sunrise-133 casualty within the week which echoed the sentiment expressed in the headlines: "Cause Collisions—Government Monkeying With the Rules Largely Responsible." This article was evidently written after hearing such views expressed by some vessel masters. The expressions are certainly unjust to the government, which enacted the new rules at the express request of the organized bodies of the owners and masters of vessels, both of which bodies are certainly representative of the principal lake interests. If the bill has faults, and this is by no means proven by the collision case referred to, the blame must fall on the framers and not the enactors of the law.

It must be remembered that the enactment of the recommendations of the International Maritime Conference carried with it the repeal of all other navigation laws of the United States, and had some new measure not been enacted, the lakes would have been subject to a set of rules adapted especially to deep sea sailing, and containing requirements which are now denounced as absurd and dangerous by a large proportion of the practical men who own British ships. The re-enactment of the old law, to be applied to the Great Lakes alone, would have left the law still in an incomplete state, and those who were mainly interested decided that as a law must be passed which should be intended for use on the Great Lakes alone, one should be framed which should provide for the peculiar features of lake navigation, and which should recognize certain conditions that had been overlooked in former regulations. The exigencies of the case required haste, but there was no lack of care on this account, and the draft of the bill was submitted, through the daily press, to the public, or the interested portion thereof, for criticism, with a view to making such amendments as might be considered advisable. Objections were offered to certain clauses in the bill, and these were reconstructed so as to merit as nearly unanimous approval as possible. The bill was then presented for enactment, and was passed through both Houses of Congress in accordance with the express request of owners and masters. The charge of undue interference by the government in shipping matters is so often made with reason that it is unjust to place the blame where it should not lie.

Then, it must be admitted that nothing has been brought forward to show that the law was at all at fault in the recent collision. The published statements go to show that both parties to the collision were fully conversant with the requirements of the White bill, and the question as to whether these regulations were followed is purely one to be settled by preponderance of testimony. The captain of the Sunrise claims that the bell on the barge was not rung. The statements of the crew of the 133 have not reached THE RECORD, but it is not reasonable to suppose that they would have a bell on board and not know what it was for. If such a supposition could be entertained, it would not reflect discredit on the law, for it is incumbent upon all masters to keep themselves informed on these points, and ignorance of a law which is fourteen months old would not stand for a moment, inside or outside the courts. This leaves the question, as has been stated before, purely one of fact.

Only time will show whether this bill is faulty in not providing two sets of fog signals for steamers, one to be used when proceeding alone, and one to be used when towing. It must be pointed out, however, that a tendency toward increasing the number of signals in fog is the one feature of both the White bill and the regulations of the International Maritime Conference to which strenuous objection has been, and is being raised, on both salt and fresh water. It must be admitted that in this respect the White law must be considered by lovers of simplicity in signals to be infinitely superior to the rules which now only lack British approval to secure their general adoption.

LAKE Carriers are beginning to see that the policy of putting the engines of huge steamers in the extreme after end is at least doubtful, and is certain to shorten the life of the ship, and they will soon come around to the point of allowing builders to place the machinery nearer amidships. The art of shipbuilding is almost unique in that the methods which have stood the test of generations cannot lightly be set aside for new theories without involving some degree of loss. The idea that boats handle bet-

ter at the dock with a clean stretch over a single hold, seems based upon the wishes of the dock company rather than the vessel owner, as the discharging machinery in use on lake docks is so readily adjusted that it means little loss of time to the steamer, and the few minutes required to shift at the ore pockets certainly do not counterbalance the strain certain to be put upon the ship when light by this abnormal placing of her engines. If the reform comes, much of the credit will be do to F. W. Wheeler & Co., and the owners of the Merida and Curry, both of which, with their engines amidships, have proved most successful ore carriers, and have some of the best unloading records that have yet been shown.

CURRENT FREIGHT STATISTICS.

Shipments from Duluth and Superior for the month of May have been for ahead of any previous months. Up to the 29th the amount of wheat sent forward by lake was 12,000,000 bushels against 10,500,000 bushels up to June 1, last year. Lumber shipments were 38,000,000 feet, against 32,000,000 feet in May last year, and iron ore has made a record of 229,000 tons, against 186,000 tons last year.

Gladstone shipments for the week ending May 30 were: Ore, 13,000 tons; grain, 125,000 bushels; lumber, 625,000 feet; flour, 21,000 barrels; cedar, 45,000 pieces.

Marquette ore shipments for the week ending May 30 are 35,302 tons, and of lumber 2,200,000 feet.

The ore receipts at Ashtabula for May were 398,393 tons; total for season to June 1, 425,977 tons. Coal shipments for May were 111,425 tons, and for the season 153,842 tons. Both receipts and shipments were the largest for the month of May in the history of that port.

Buffalo's receipts and shipments for the season to June 1 are as follows:

Receipts.	May.	Since Opening.
Wheat, bu.....	10,464,157	12,159,161
Corn, bu.....	3,199,667	8,627,784
Oats, bu.....	5,023,672	7,397,824
Barley, bu.....	1,280,693	1,483,193
Rye, bu.....	592,998	637,998
Malt, bags.....	7,838	11,805
Flaxseed, bu.....	499,570	499,570
Flour, bbls.....	913,163	1,112,278
Millfeed, sacks.....	172,206	179,601
Copper ore, tons.....	1,780	1,780
Copper, tons.....	16,947	17,360
Copper ore, tons.....	2,573	2,573
Iron, pig, tons.....	3,825	3,825
Iron ore, tons.....	18,159	18,159
Lead, pigs.....	52,673	70,938
Lumber, feet.....	22,696,283	23,922,283
Lath, pieces.....	67,550	67,550
Oilcake, pkgs.....	14,039	20,384
Pork, bbls.....	500	500
Posts, number.....	3,520	6,520
Seed, bags.....	6,720	6,951
Stavebolts, cords.....	244	244
Shingles, number.....	12,102,000	12,758,564
Spelter, plates.....	22,853	25,054
Ties, number.....	58,939	83,439
Wood, bales.....	2,691	3,241
Shipments.	May.	Since Opening.
Coal, tons.....	284,284	330,989
Cement, bbls.....	103,305	120,432
Salt, bbls.....	74,297	90,405
Sugar, bbls.....	128,703	128,703

NOTICE TO MARINERS.

Notice is given by order of the Lighthouse Board that the damage caused to light vessel No. 64, by being run into on May 11, having been repaired, she was, on May 22, replaced on her station, on the W. side of the S. end of Limekiln Crossing dredged channel, Detroit River. The temporary light vessel marking the station while repairs were being made, was withdrawn on the latter date.

Official notice is given that, on or about June 1, 1896, a gas buoy, painted black and showing a fixed white light, will be substituted at the same moorings for the present Lower Entrance buoy, No. 1, second-class can, located about 20 feet southeasterly of the southeast bank of the straight channel from Lake Erie into Maumee Bay. Cedar Point, S. 11° E.; Maumee Bay E. range lights, SW. by W. 1/4 W.; Turtle Island lighthouse, W. 1/2 S. Bearings are true and given approximately.

The tripod at the head of Portage River was swept away by the ice this spring and never replaced. Navigation is dangerous at nights and even risky by daylight to pilots unacquainted with the channel. New range lights are being built, but it will take several months to get them in place, and some temporary arrangement should be made to replace the tripod.

SHIP BUILDING AND REPAIRS.

NEW WORK AT THE SHIPYARDS.

Capt. James Davidson, without saying a word to anybody, has been laying the keel for another new steamer, the sixth vessel to be built at his yard this year. She will be almost a duplicate of the Madagascar and of the largest steamer now building at his yard, and will get a share of the late fall trade this season.

It seems to be taken for granted that additions will be made to the Rockefeller fleet during the coming winter, but just what form they will take has not been settled. Manager L. M. Bowers has, in a recent interview, admitted that two more consorts might possibly be built for the line, but stated definitely that nothing will be done for some little time.

There has been a good deal of daily newspaper talk to the effect that the C. & B. Transit Co. would soon place an order for a duplicate of the City of Buffalo, and that a similar steamer would be ordered by the Detroit & Cleveland Steam Navigation Co., in order to make the Toledo-Mackinaw route a daily line. It is safe to say that both these reports are premature for several years.

The Lake Michigan Car Ferry Transportation Co. is getting out timbers for building, at Peshtigo, two more transfer scows similar to that just launched for car ferryage between Chicago River and the Calumet.

LAUNCHES OF THE WEEK.

ALGERIA.—The schooner Algeria, the last of the three schooners which Capt. James Davidson, of West Bay City, built during the winter, was launched at his shipyard on the morning of the 30th ult. She is a duplicate of the Armenia and Abyssinia, the latter of which has just left Buffalo for Superior with 2,800 tons of coal.

VINLAND.—The new schooner Vinland was launched by Abram Smith & Son at their yard, Algonac, last Saturday afternoon, May 30, at 2 o'clock. The schooner was begun on builders' account, but was completed to the order of F. W. Gildinst, of Alpena, and others. She will be in commission in a few days, and will be commanded by Capt. Charles Hanson, late of the schooner Nellie Mason.

S. M. FISCHER.—The steel tug S. M. Fischer was very successfully launched at 4 o'clock Tuesday afternoon, 20th inst., at the yard of the Craig Ship Building Co., Toledo. She is the largest and most powerful tug on the chain of lakes, being 148 feet long by 30 feet beam, and 17 feet hold, with a water bottom. She will be fitted with a set of Hodge triplex engines, and has two large boilers. She has been more particularly described in previous issues. She is built for the Lake Michigan Car Ferry Transportation Co., and is named in honor of the president of the line.

NOTES ON NEW TONNAGE.

The new yacht Enquirer, owned by W. J. Connors, of Buffalo, will be launched by the Union Dry-dock Co., that city on Saturday, the 6th inst., at 4:30 o'clock. She will go into commission two weeks later.

The new steel steamer building at the Union Dry-dock Co.'s yard, Buffalo, for the the Union Steamboat Co., (Erie Railroad) will be called the Ramapo, after a station on that line. She will be launched in a short time.

The new tug Cecilia, building at Fish Creek, Wis., for Hill Bros., is expected to make 14 to 18 miles per hour.

GENERAL REPAIR WORK.

CLEVELAND.—The Moonlight and Kent have been receiving some work at the Cleveland dry-dock, but the extent of the repairs necessary has not yet been settled. The City of Naples was in the dock for a new fore-foot and piece of keel.

At the Ship Owners' dry-dock the John Craig was in to stop a leak, and the schooner Tasmania to repair the bottom damage made by striking at the Encampment. The steamer St. Lawrence got a new stem and fore-foot, and the Chocaw is now in the dock, having arrived safely from the Sault in charge of the Swain Wrecking Co., who did an excellent patching job on her. A survey will be held in a day or two. Joseph R. Oldham has been looking after her in the interests of the underwriters.

CHICAGO.—At Miller Brothers' shipyard the schooner

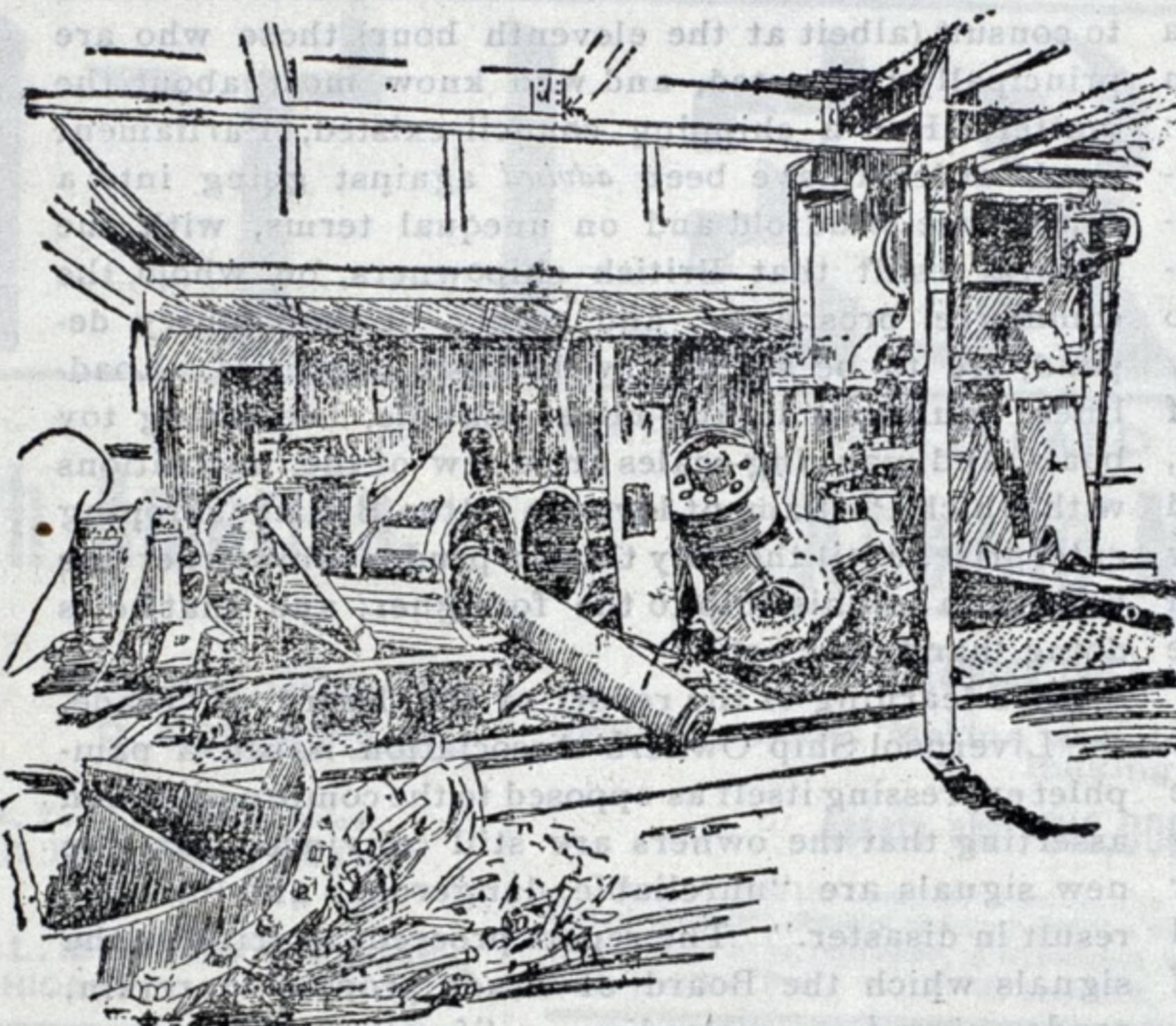
George J. Boyce is in dock for a new fore foot and a U. S. Government dredge for repairs and calking. At the Chicago Ship Building Company's yard, work is proceeding rapidly on the large steel steamer under construction for the Minnesota Steamship Co., which is to be launched on June 27th, and will be named the Maricopa.

Captain James S. Dunham has purchased the schooner Moselle and will rebuild her at his shipyard.

MILWAUKEE.—The steamer Escanaba is in the dry-dock at the west shipyard. Her damage is much greater than had been reported, and will probably reach \$4,000. She will require the renewal of the lower part of her stem, a new fore foot, a considerable length of new keel and garboards forward and aft, some new bottom planking, new shoe and wheel, and a great deal of recalking.

DETROIT.—The schooner Iron City is again in commission, after a \$10,000 rebuild at the Clark dry-dock. The new boiler for the Iron Age is nearly finished, and will be put on board some time next week. The City of Toledo is getting a new wale strake to protect her paddles.

BUFFALO.—Messrs. Frank Williams, of Bay City, and C. F. Strasmer, of the Anchor Line, held a survey on the St. Louis at Tonawanda. Her arches are buckled several inches and the stern is badly smashed. Suit will be brought against the Ketchum, with which the St. Louis collided. The tug Alpha is being dismantled here and will receive a rebuild, consisting of new decks and upper works, and a new boiler, 8x14 feet, building at the Lake Erie Boiler Works. Next winter the engine will be overhauled and a new cylinder put in.



ENGINE ROOM OF THE MERIDA AFTER THE WRECK.

REPAIR NOTES.

Pickands, Mather & Co.'s fueling scow Atlantic, which has been enlarged and rebuilt at Devney's shipyard, Ashtabula, was put in the water Tuesday. She will be used at Erie.

The car ferry steamer Ann Arbor No. 2, has been undergoing extensive repairs at Frankfort. Her smoke stack has been lengthened and she has been repainted inside and out.

The tug Record was laid up at Duluth several days with a broken crank.

The steamer Alcona damaged her crank pin Monday, and is getting repairs at the Sault.

A CONTRACT AMERICA SHOULD HAVE HAD.

On Saturday, May 16, Yarrow & Co., Poplar, Eng., launched the first of four armor plated torpedo boat destroyers for the Argentine government. These vessels are 190 feet long by 19½ feet beam, and have two sets of triple-expansion engines intended to indicate about 4,000 horse-power. The special feature of these destroyers is that they are partially armored, and thus protected against the smaller class of projectiles throughout the entire length of the machinery department. The vessels are to be fitted with Yarrow's water-tube boilers, an illustrated description of which appeared in THE RECORD two weeks ago.

About the middle of June the D. & C. line will put on its regular service of four trips a week between Toledo, Detroit and Mackinac.

THE WRECK OF THE MERIDA'S ENGINES.

Special Correspondence to The Marine Record.

DETROIT, June 2.

The engine room of the fine steel steamer Merida, owned by the Whitneys, of Detroit, presented a sight of unusual interest when she was towed to her dock, after the disaster in Lake Huron, off Sanilac, about midnight of May 27. The huge masses of finely tempered and tested steel lay in all directions in the engine pit, and the top of the low-pressure cylinder lay at some distance from the engine room on the floor. Some forty tons of metal was broken and split by the powerful concussion; the supports were broken off at the tops of two of the cylinders, and the space between the support and above the crank pit was jammed with tons of mangled metal.

Just how the accident happened it is hard to explain, for it was all over in a few seconds; but the first engineer, who was on watch, heard a sound, and immediately the immense cylinders began to go through themselves. He sprang to the throttle and tried to shut off the steam, but the engine above him began to fall, and the man ran for his life up the high stairway. The two pieces of the low pressure cylinder-head lay, when seen by the RECORD correspondent, fairly across the path the man had to take in escaping, and that he was not killed seems marvelous. An engine more completely wrecked could scarcely be imagined. Had the machinery not fallen just as it did, it is probable it would have gone through her bottom. Repairs will cost fully \$4,000.

WRECKS AND WRECKING.

Few total losses were recorded during the week, and none were valuable craft. On last Thursday the steam barge Transfer, which has been engaged in carrying pig iron from Cleveland to Lorain, was caught in the gale and heavy sea, and sank this side of Lorain. The barge listed so badly while filling that she capsized, dumping out her cargo, and then drifted ashore. She will probably be raised, although she will prove a constructive total loss. The crew were rescued by Capt. Jim Bowen, of the tug Cascade, of whose heroic efforts Capt. Hewitt expresses hearty appreciation. The Transfer is owned by Mr. John Corrigan, of Cleveland.

The little steamer Grace Williams, while towing across Lake Michigan behind the tug Temple Emery, in the same gale, parted her tow line and went down in 275 feet of water, about midway between the Manitowish and the west shore. She was valued at \$5,000 and had just been purchased by Capt. LeClair, Joseph Harrington and Albert Mann, of Two Rivers, Wis.

The tug C. A. Lorman was washed ashore at Leamington, Ont., her crew narrowly escaping. It will probably cost nearly all she is worth to release her.

The schooner R. Kanters was wrecked on the rocks at Pilot Island Wednesday and has been stripped and abandoned. She was worth only a small sum, and was owned, half by ex-Mayor Kanters, of Holland, and half by Peter Blake, of Muskegon, Mich.

The schooner Arthur, with 17,500 bushels of corn, struck a rock in Galoup Rapids, head of St. Lawrence River, Friday morning, May 29, and sank in thirteen feet of water in fifteen minutes. Her cargo is a total loss. The schooner can be raised.

Various estimates are made of Capt. Jay Hursley's profits on his venture in purchasing the Moonlight and Kent. They cost him \$7,000, and the expense of getting them off was less than \$4,500. The schooners were valued at \$20,000 apiece when they went ashore. The price Capt. Hursley obtained for them has not been given out, but he has evidently netted a first-class sum, besides adding materially to his fame as a wrecker.

The steamer H. A. Root has been taking aboard the wrecking outfit of the American Wrecking and Salvage Co., which will try to locate the wreck of the Pewabic, sunk in collision off Lake Huron in 1865, and to recover her valuable cargo of copper.

Capt. James Reid succeeded last week in releasing the schooner Commerce from Seul Choix Point, and took her to Harbor Springs, where she was repaired temporarily and then taken to Burger & Burger's dry-dock, Manitowoc. She is in good condition, but has been ashore all winter, and previous efforts to get her off have cost considerable more than her value.

ENGLAND TAKES SOME EXCEPTIONS.

The London Times, in its issue of May 9, says: Mr. Ritchie, president of the Board of Trade, yesterday received a deputation representing the principal shipping organizations in London and at the outports on the subject of the sound signals for fog proposed in the Rules of the Road at Sea as formulated at the Washington International Marine Conference. The following bodies were represented: Liverpool Steamship Owners' Association, Liverpool Shipowners' Association, Mercantile Marine Service Association, Clyde Steamship Owners' Association, Glasgow Shipowners' Society, Chamber of Shipping of the United Kingdom, Shipping Federation, Shipmasters' Society, London, Shipmasters' and Officers' Federation, London Shipping Exchange (Sir Donald Currie, M. P.), Lloyd's, together with Sir G. Baden-Powell, M. P., and Mr. Cayzer, M. P. After hearing the deputation in private, the president announced that the Board of Trade had decided to abolish regulation *g*, "A steam-vessel wishing to indicate to another 'the way is off my vessel; you may feel your way past me,' may sound three blasts in succession—namely, short, long, short—with intervals of about one second between them." Regulations *f*, *h*, and *i* would be amalgamated, as they would read together as follows: "A vessel when towing, a vessel employed in laying or in picking up a telegraph cable, and a vessel under way which is unable to manoeuvre as required by these rules shall, instead of the signals prescribed in subdivisions *a* and *c* of this article, at intervals of not more than 2 minutes sound three blasts in succession—namely, one prolonged blast followed by two short blasts. A vessel towed may give this signal, and she shall not give any other." Mr. Ritchie further intimated that he was carefully considering, with a view either to its amendment or withdrawal, regulation *e*, which, as proposed in the final Act, stood as follows: 'A vessel at anchor at sea, when not in ordinary anchorage ground, and when in such a position as to be an obstruction to vessels under way, shall sound, if a steam-vessel, at intervals of not less than two minutes, two prolonged blasts with her whistle or siren, followed by ringing her bell; or, if a sailing vessel, at intervals of not more than one minute, two blasts with her fog horn, followed by ringing her bell.' If Congress should agree to the changes thus proposed it will be necessary to pass a bill through both branches of the American legislature before adjournment, which will take place towards the end of the present month.

Fairplay comments upon this finding as follows:

"Beyond the fact that the deputation was one of the most representative of shipping that could possibly be convened, the general public will probably consider the further particulars not very interesting, and will wonder why shipowners should object to the Board of Trade or Parliament fitting them out with nice ready-made alphabetical blast and siren signals, with bells and drums thrown in as occasion may require, all beautifully Americanized and thoroughly up to date. But then the general public does not know that each separate signal means a separate extra risk of liability for shipowners in case of collision, nor that the British shipowners' personal liability amounts to £15 per ton, while the foreign shipowners'—including Venezuelans,—personal liability amounts to nothing. That is where the hideous joke comes in. Let us remember that British subjects own half the tonnage of the world, a consideration which our legislators calmly ignored when they allowed this country to go into the Washington Conference on equal terms with twenty other nations, all of whom together only totalled the remaining half, and some of which had not as many ships as single British firms might have.

"One of the six new signals then proposed at Washington, *g*, is positively dangerous, all are confusing, none are conducive to safety, and yet the British shipowner, with his heavy liability, was to be saddled with these extra risks, well knowing that the failure of his officers to remember all or any of them at the right time would make him responsible in damages. This is not fair poker. The foreigner, who has few ships and no personal responsibility, cares very little how many extra signals are proposed; he is sharp enough to see that the Britisher with the liability must take the risk and run the worst chance, which for the foreign competitor is good business. The International Conference was held on that great continent which overflows with

legions of fearless inventors, whose wonderful instruments will produce long and short blasts to indicate every point of the compass. But in moments of emergency the average nautical brain is unable to think in 32 varieties of long and short blasts, and the British shipowner, knowing this, is apt to add an additional blast of his own invention.

"Mr. Ritchie and the naval advisers of the Board fenced with the nautical talent present at the meeting, but failed to convince any one. Signal *g* was quickly abandoned, and had the remaining five been merely voluntary or experimental, the Board would have had a fair case; for it is difficult to argue against the suggestion that hearing a lot of unintelligible signals all going at once should at any rate not induce less caution than hearing the signals now in use. It is different, however, when the six extra signals are to be compulsory; six more chances of making a mistake are involved, which, though it might not cause the accident, would mean damages. A voluntary signal is one thing, and means very little; a compulsory signal is quite another thing, and means a great deal when a £15 per ton liability hangs upon it. When the president rose to leave, neither party was convinced, and the discussion had suddenly drifted into the consideration of the comparative merits of bells and blasts, and some one suggested that the Board of Trade should enforce a standard bell of equal size and tone for Atlantic liners or coasting schooners. The permanent officials seemed to welcome the idea, and as any tampering with the bells also implies tuning gongs, and Turkish kettle-drums, the department is likely to have a musical time of it.

"The only hopeful feature of the whole business is the evident desire of the President of the Board of Trade to consult (albeit at the eleventh hour) those who are principally interested, and who know most about the matter. Had a shipping council existed, Parliament would at least have been advised against going into a conference blindfold and on unequal terms, with the natural result that British shipowners, on whom the commerce, prosperity, and safety of the country depend, are to be saddled with fresh liabilities. Load-lines, squinting lights, mixed signals, life-saving toy boats, and manning scales are a few of the impositions with which Parliament loves to fetter British shipping enterprise, until the only thing a prudent shipowner has to do is to sell his ship to the foreigner; and that he is doing 'hand over fist.'"

Upon learning of the report of the Board of Trade, the Liverpool Ship Owners' Association issued a pamphlet expressing itself as opposed to the compromise, and asserting that the owners are still convinced that the new signals are "unreliable, dangerous, and likely to result in disaster." The report proceeds to criticise the signals which the Board of Trade propose to retain, condemning *b* as misleading, *c* (if retained) as unanimously objected to by the British mercantile marine, and the proposed new signal *f* as likely to serve no practical purpose and to be confusing. They express themselves as satisfied that safety can be obtained only by the use of the simplest signals, and that it is of the utmost importance to minimize the number of sounds used in fog to the smallest number possible.

TRADE AND INDUSTRIAL NOTES.

The Penberthy Injector Co. on May 12th completed the one hundred thousandth "Penberthy" injector manufactured at their Detroit factory. In honor of this event, the company intend giving their employes a holiday and excursion a little later in the summer.

The MacKinnon Manufacturing Co. are having a great run on their patent steamboat wheels. Five have already been shipped this week, and orders for several more are on hand.—Bay City Tribune.

The Bucyrus Steam Shovel and Dredge Co., of South Milwaukee, Wis., has received an order for the third hydraulic dredge to be used between Cairo and Vicksburg, on the Mississippi River. The boat which carries the machinery is to be 138 feet in length by 38 feet beam and 8 feet deep. The hull will be of steel. The engines will be of 800 horse-power, and will drive a centrifugal pump having suction and discharge 34 inches in diameter. The estimated capacity of the machine is 2,500 cubic feet per hour. The suction is arranged to cut a channel of 35 feet in width at one cut, and the discharge is 1,000 feet in length and carried on floats. The maximum depth of cut the machine will take is 15 feet.

Steam is furnished by six externally fired marine return flue boilers. The work these dredges are employed in is that of cutting out sand bars which form each year across the channel of the Mississippi. Between Cairo and Vicksburg there are thirty-three of these, ranging in width from 400 to 2,400 feet. The width of the channel cut is from 100 to 250 feet. The dredges formerly built for this service by the Bucyrus people have been wonderfully successful, and the placing of this order is the result of the satisfaction they have given to the government engineers.

H. G. TROUT, Buffalo:—The wheels recently ordered were for the ocean going tug Luckenbach, the steamer Lucy, and the U. S. engineer steamer Lucerne. The engineers of the boats speak in the highest terms of the results attained, and I am sure that these boats will never swing any other than the "Trout" wheel. Wishing you much success, we remain, Yours truly,

CHAS. A. McLEAN, Mgr.,
Elizabeth Iron Works, Norfolk, Va.

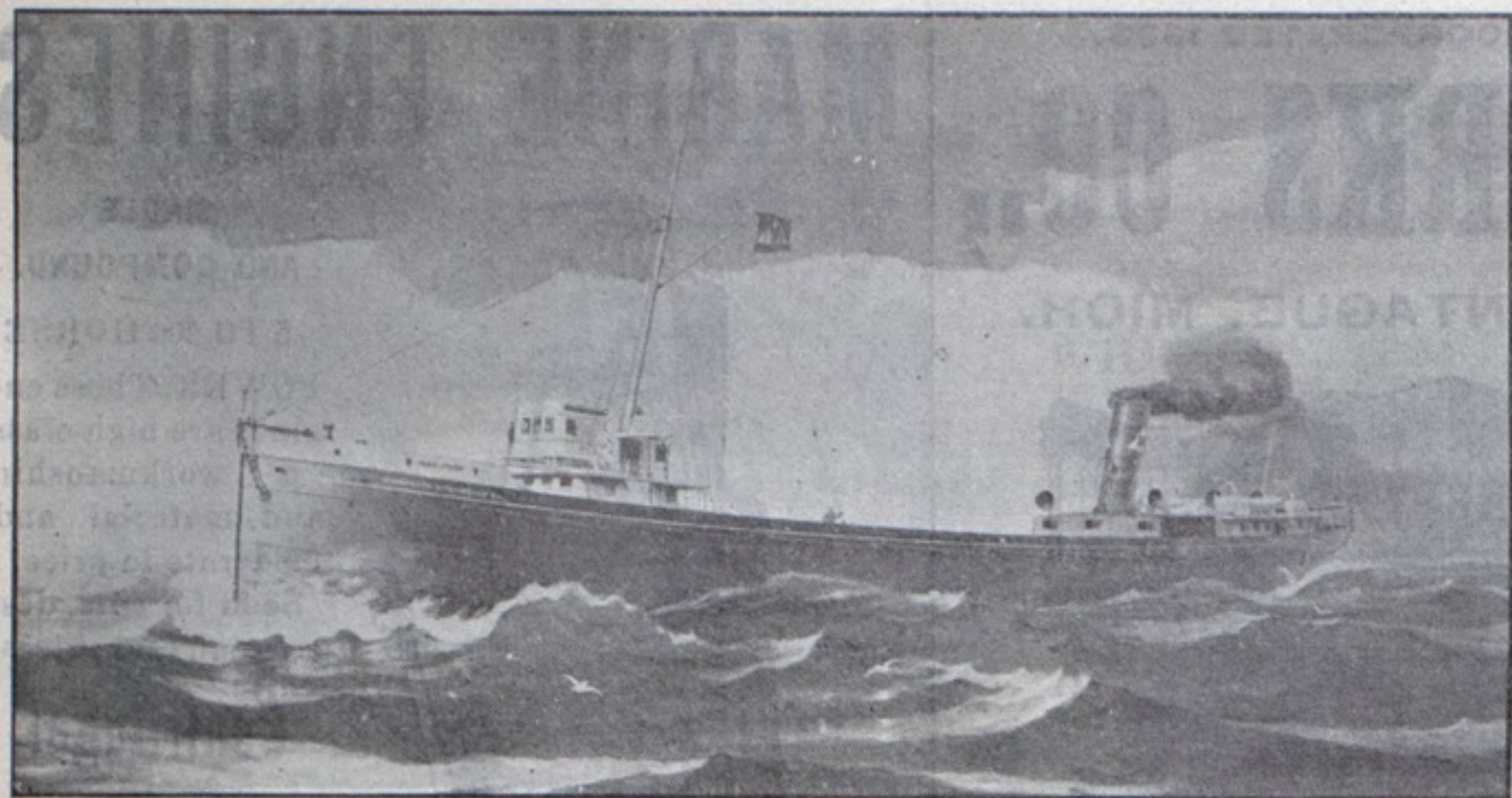
PROPOSALS.

TREASURY DEPARTMENT, Office of General Superintendent U. S. Life-Saving Service, Washington, D. C., May 28, 1896. Sealed proposals will be received at this office until 2 o'clock p. m. of Wednesday, the 24th day of June, 1896, for furnishing supplies required for use of the Life-Saving Service for the fiscal year ending June 30, 1897; the supplies to be delivered at such points in New York City, Grand Haven, Mich., and San Francisco, Cal., as may be required, and in the quantities named in the specifications. The supplies needed consist of beds and bedding, blocks and sheaves, cordage, crockery, furniture, hardware, lamps, lanterns, etc.; lumber, medicines, etc.; paints, oils, etc.; ship chandlery, stoves, etc.; tools and miscellaneous articles; all of which are enumerated in the specifications attached to the form of bid, etc., which may be obtained upon application to this office, or to the Inspector of Life-Saving Stations, 24 State Street, New York City; Superintendent Eleventh Life-Saving District, Grand Haven, Mich.; and Superintendent Twelfth Life-Saving District, New Appraisers' Stores, San Francisco, Cal. Envelopes containing proposals should be addressed to the "General Superintendent U. S. Life-Saving Service, Washington, D. C." and marked on the outside "Proposal for Annual Supplies." The right is reserved to reject any or all bids, and to waive defects, if deemed for the interests of the government. S. I. KIMBALL, General Superintendent. 23-24

U. S. ENGINEER OFFICE, 1637 Indiana Ave., Chicago, Ill., May 26, 1896. Sealed proposals for dredging at entrance to Calumet Harbor, Ill., will be received here until 12, noon, June 9, 1896, and then publicly opened. Information furnished on application. W. L. MARSHALL, Maj. Engineers. 22-23

U. S. ENGINEER OFFICE, 213 Woodward Ave., Detroit, Mich., May 19, 1895. Sealed proposals for furnishing all labor, materials and appliances for (E) widening channel below Islands at Little Rapids; (F) widening channel at angle, foot of Hay Lake; and (G) widening channel from dike to angle at Little Mud Lake, will be received here until 2 p. m., June 18, 1896, and then publicly opened. Information furnished on application. G. J. LYDECKER, Lieut. Col. Engineers. 21-24

OFFICE OF THE LIGHTHOUSE ENGINEER, 7TH AND 8TH DISTRICTS, 349 Carondelet Street, New Orleans, La., May 11, 1896. Proposals for the erection of eight square and seven triangular beacons for lighting the Mobile Ship Channel, Ala., will be received at this office until 12 o'clock M. June 8, 1896, and then publicly opened. Forms of proposals, plans and specifications showing what is required, can be had or seen by applying to this office. JAMES B. QUINN, Major and Lighthouse Engineer. 21-24

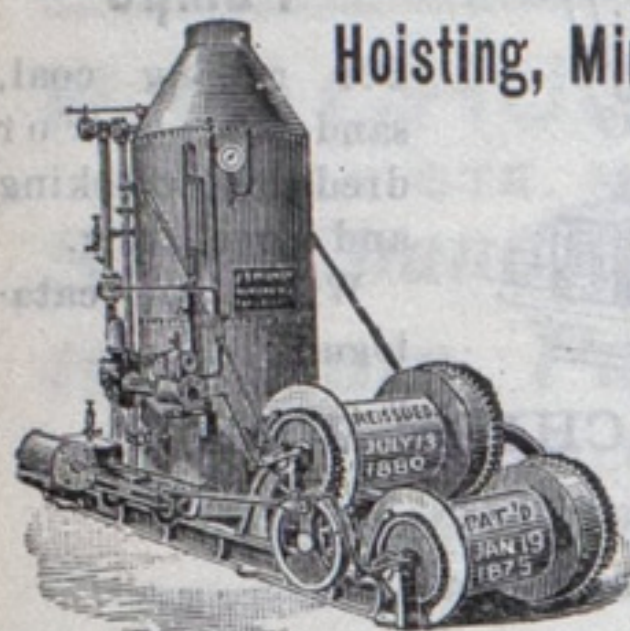


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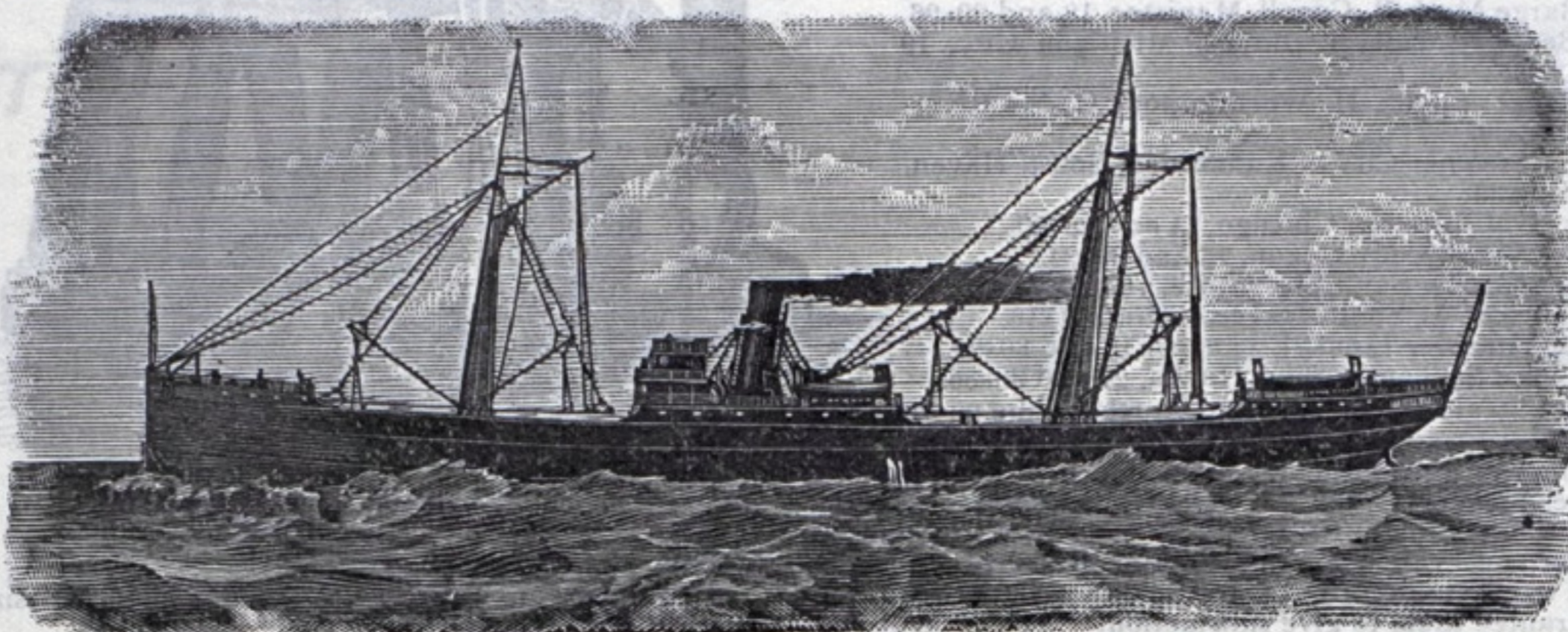
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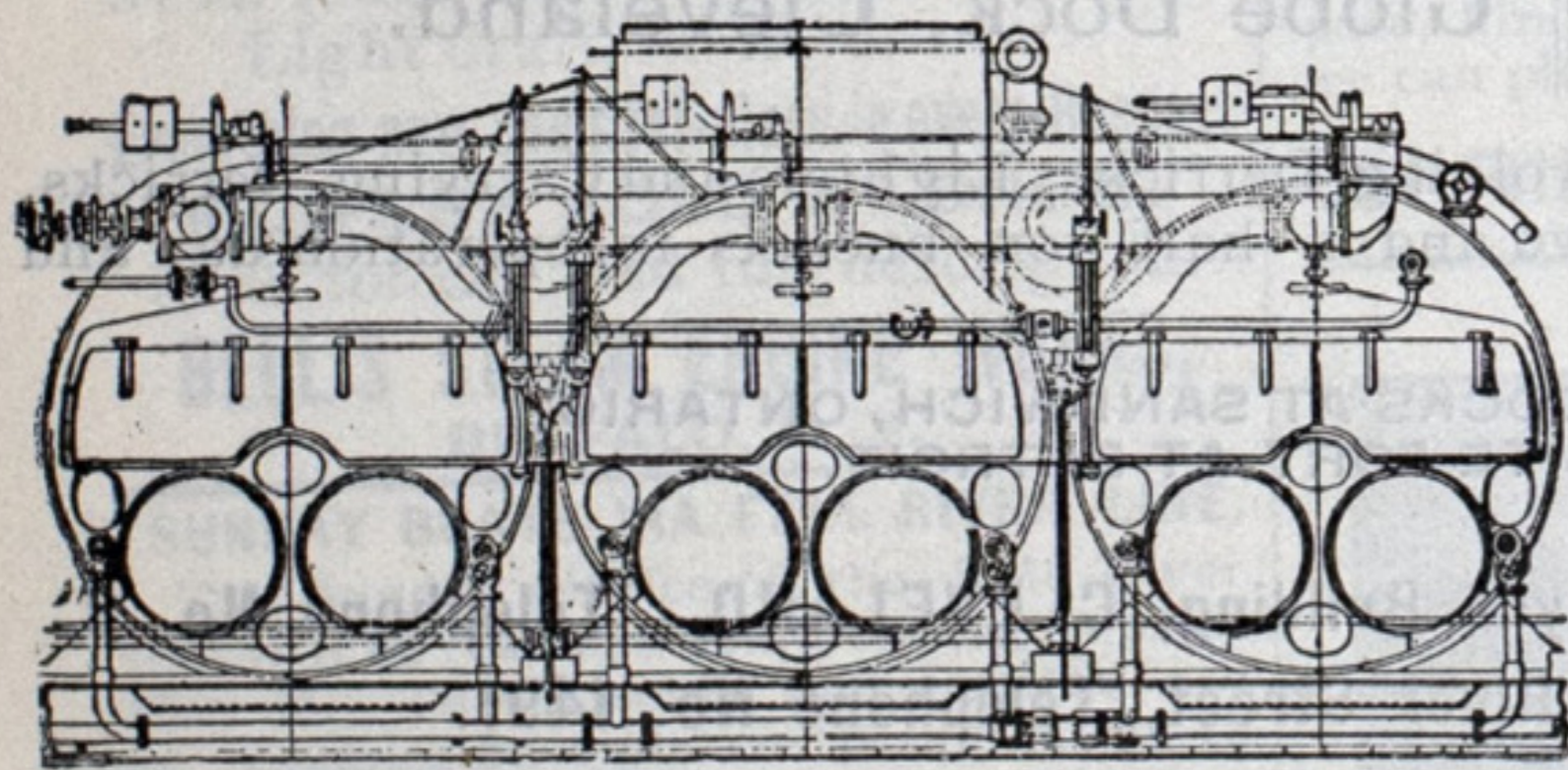
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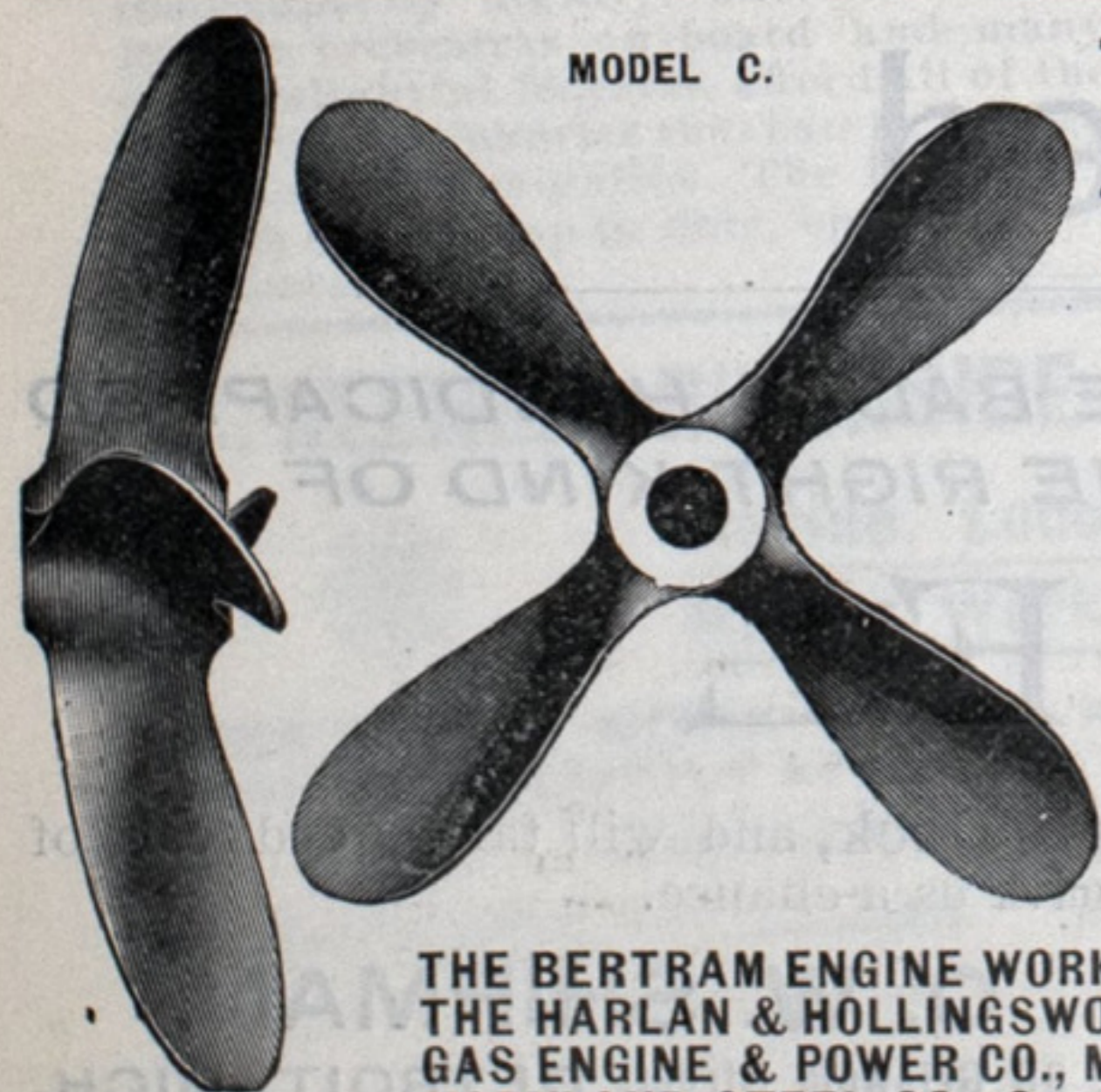
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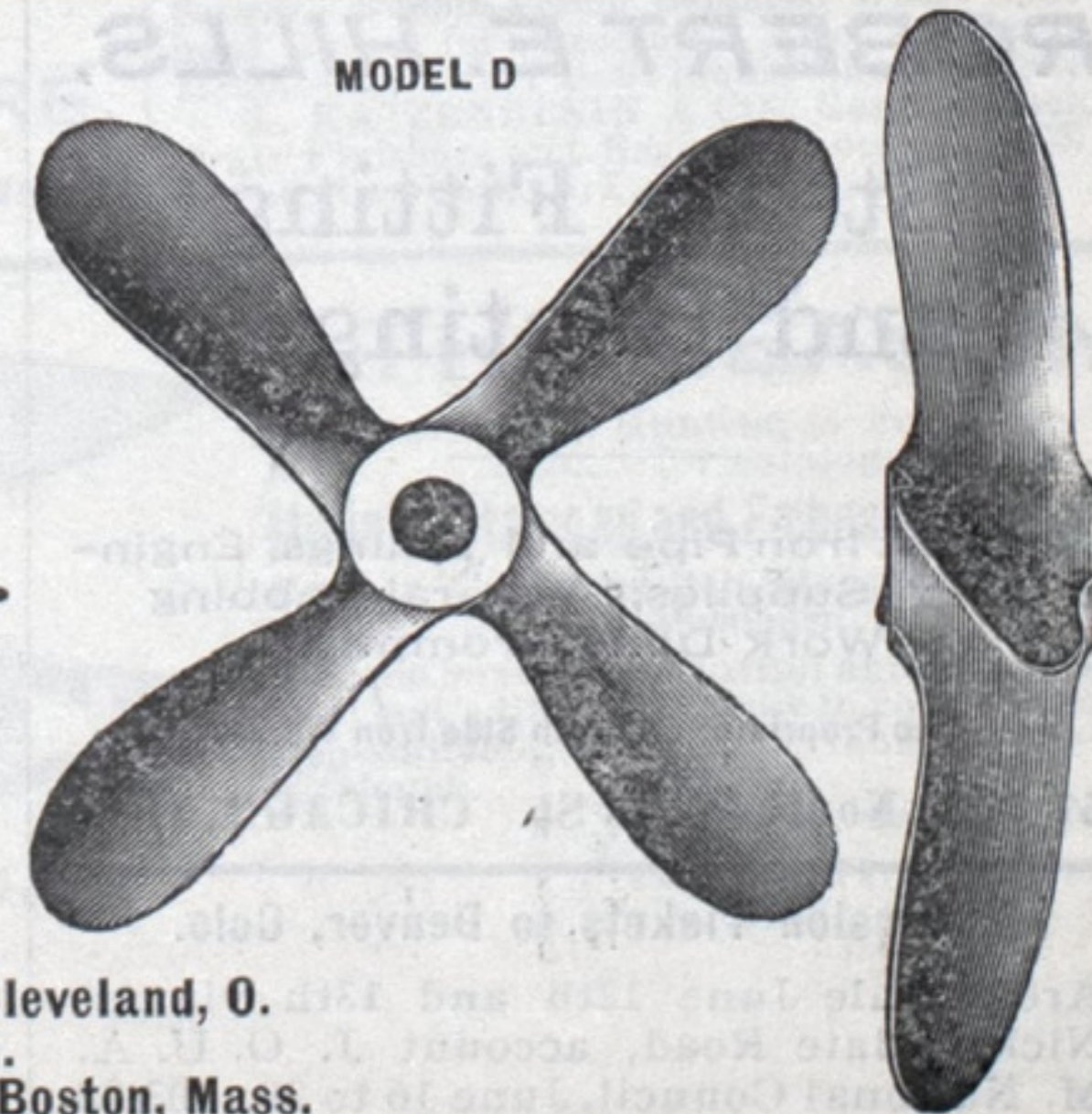
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GAS ENGINE & POWER CO., Morris Heights Station, N. Y. City.
MARYLAND STEEL CO., Sparrows Point, Md.
MARINE IRON WORKS, Chicago, Ill.

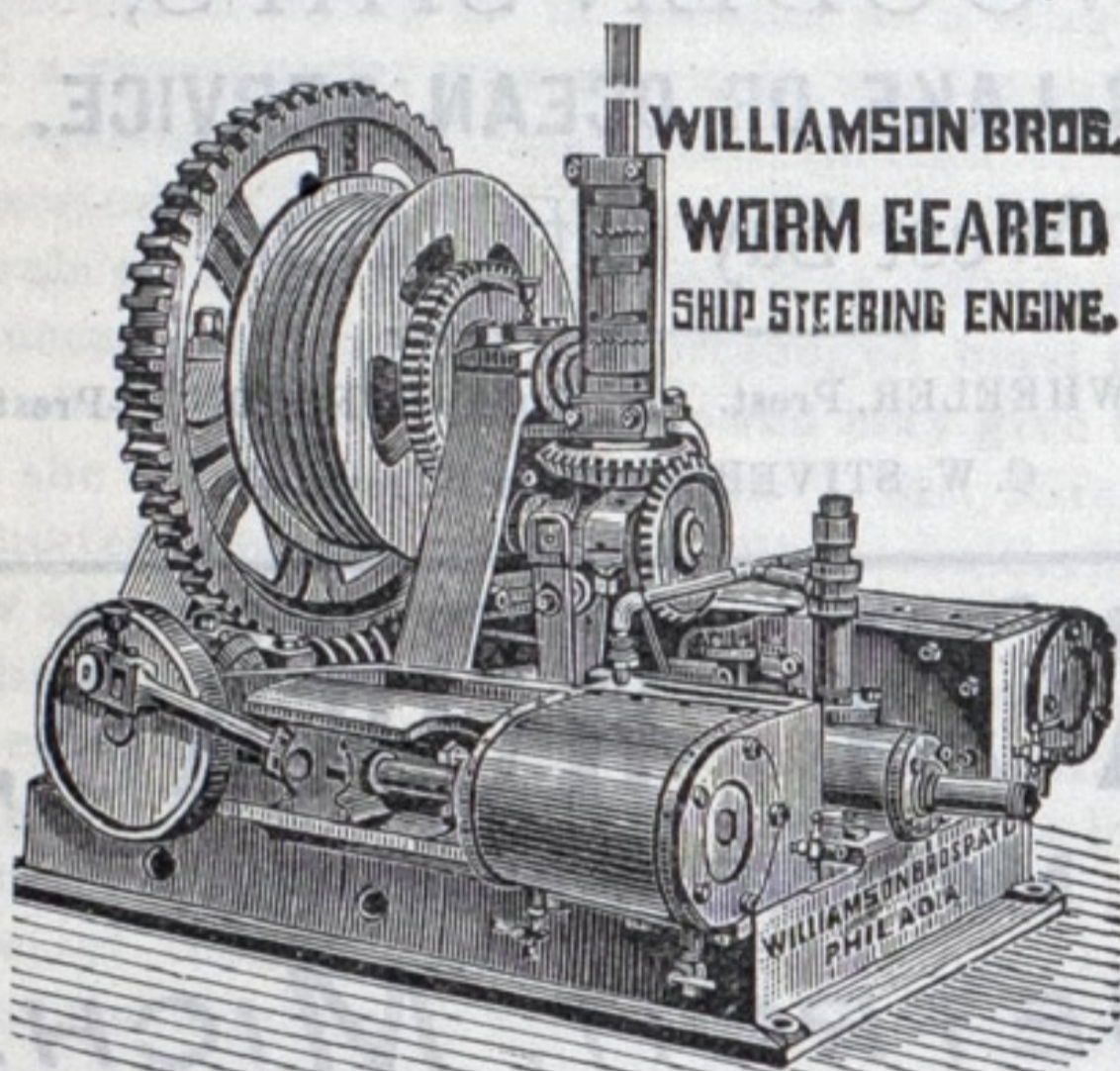
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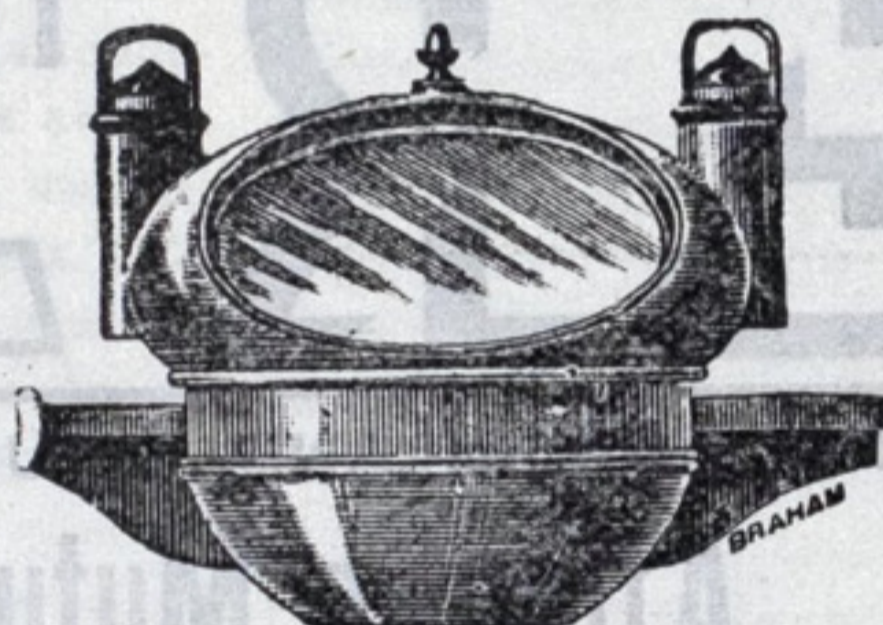
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Tug Peter Coates, Sault Ste. Marie, 10 and 20x16.
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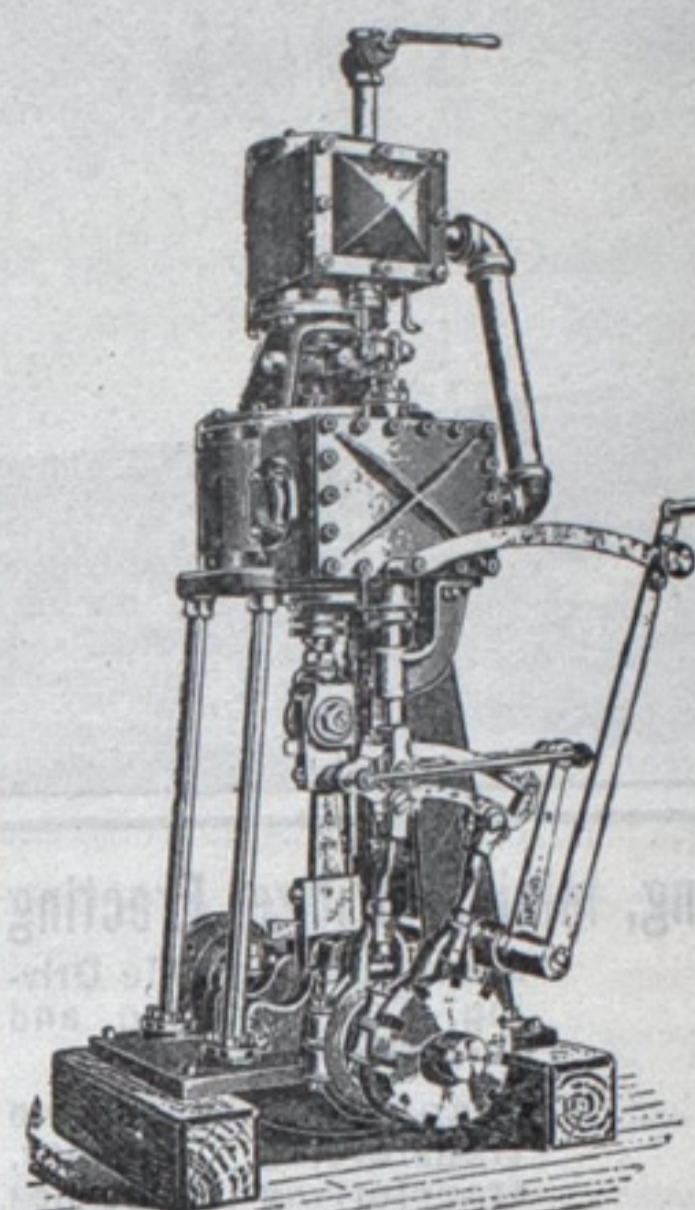
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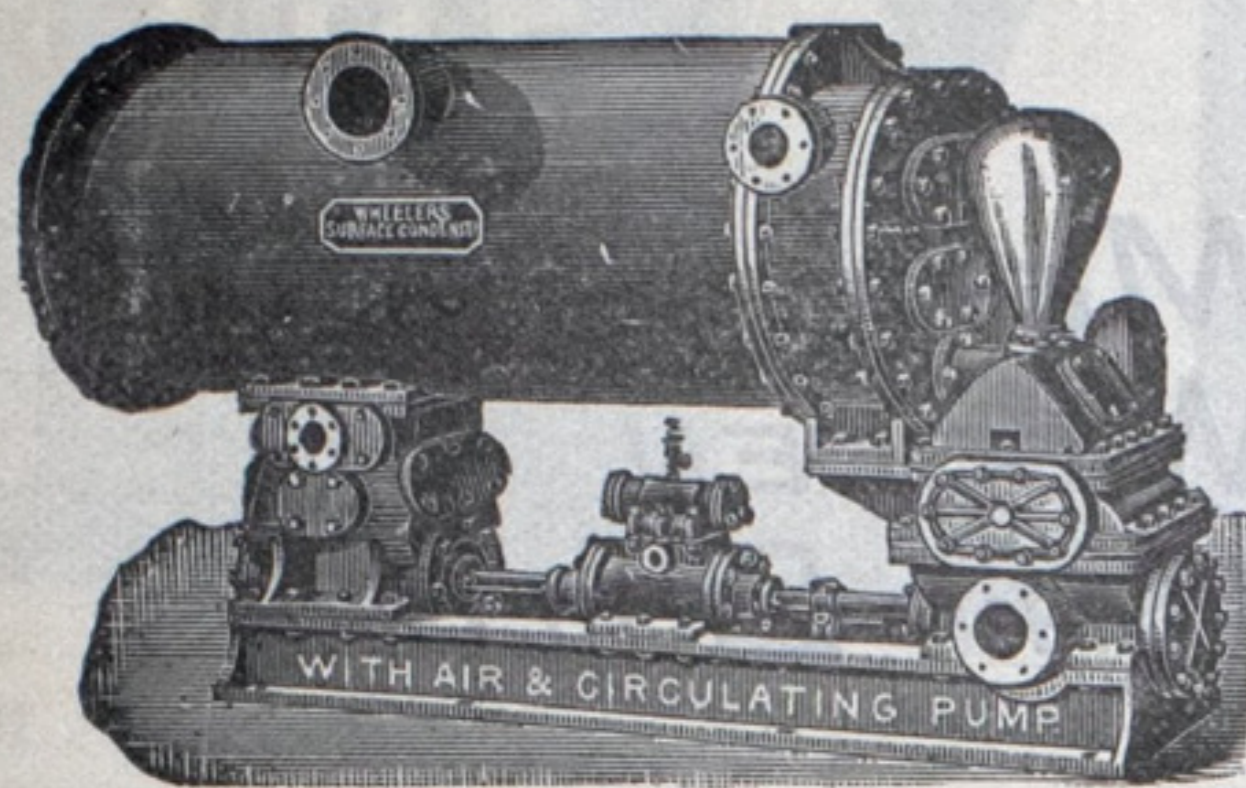
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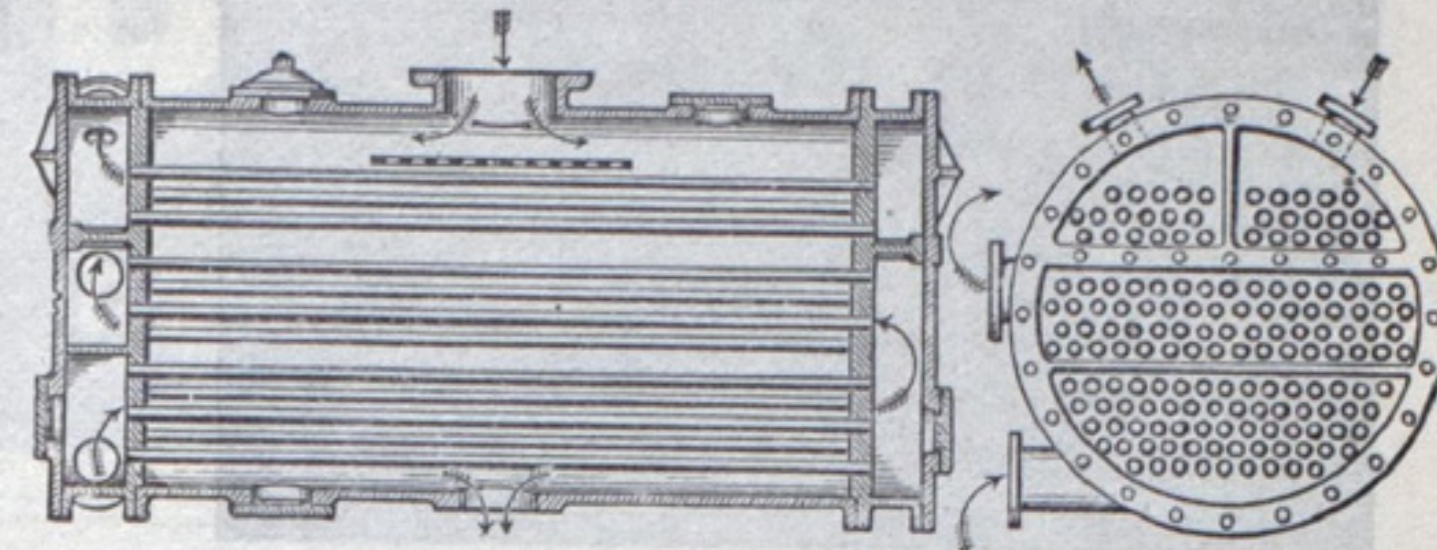
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D. T. Helm.....	14x72	21x17 83	68	18	9.3	
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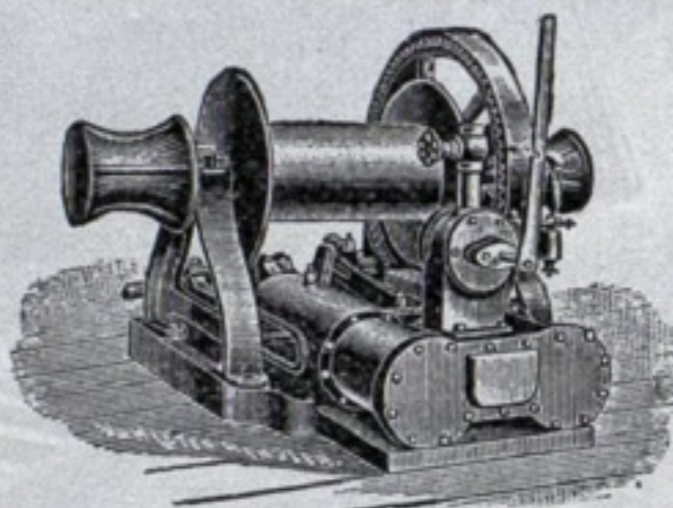
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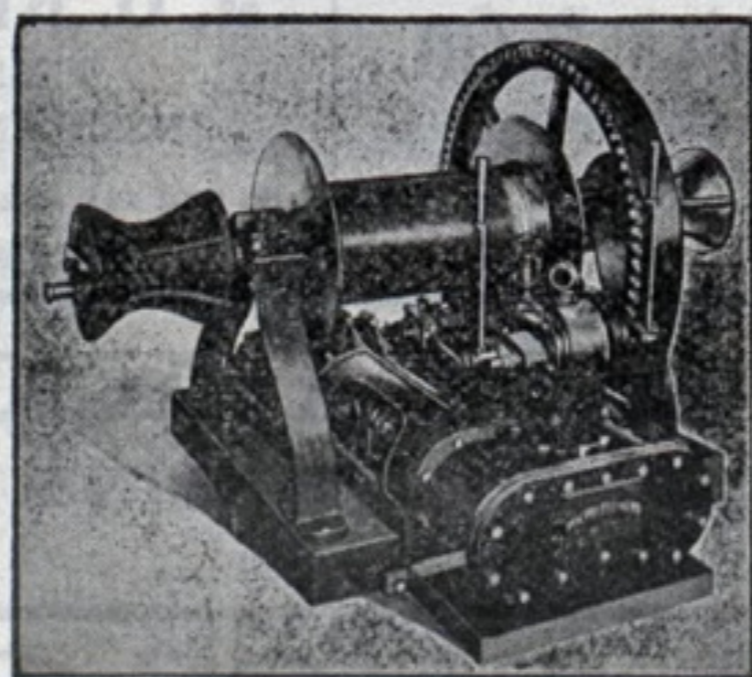
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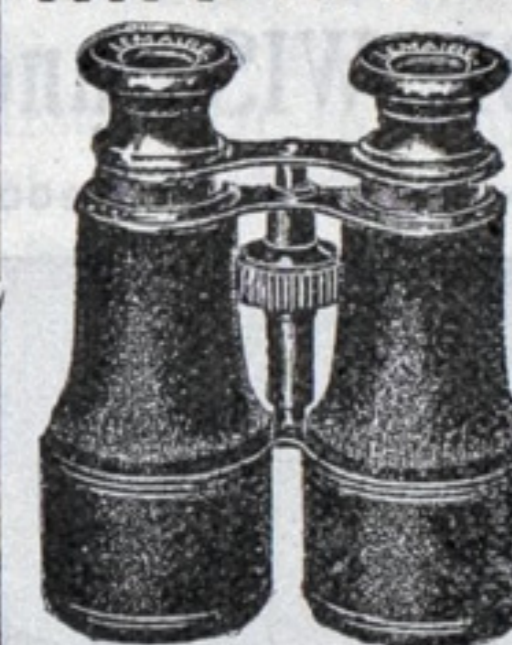


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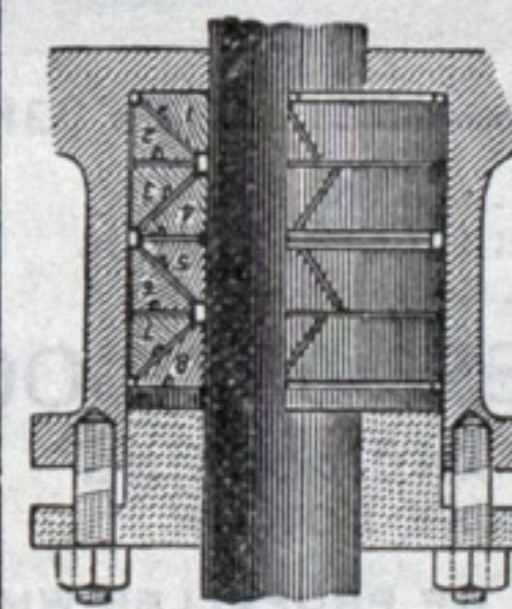
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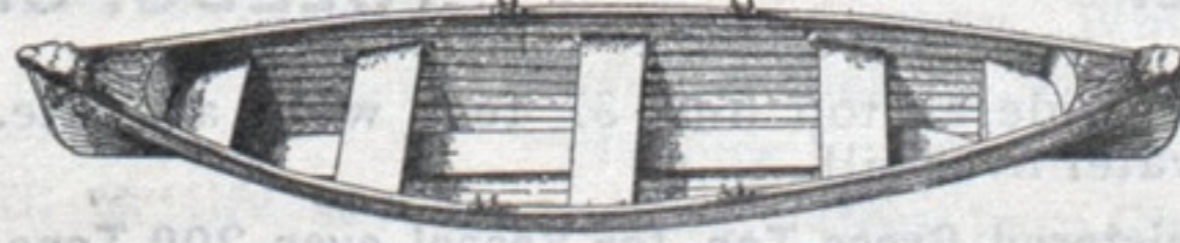
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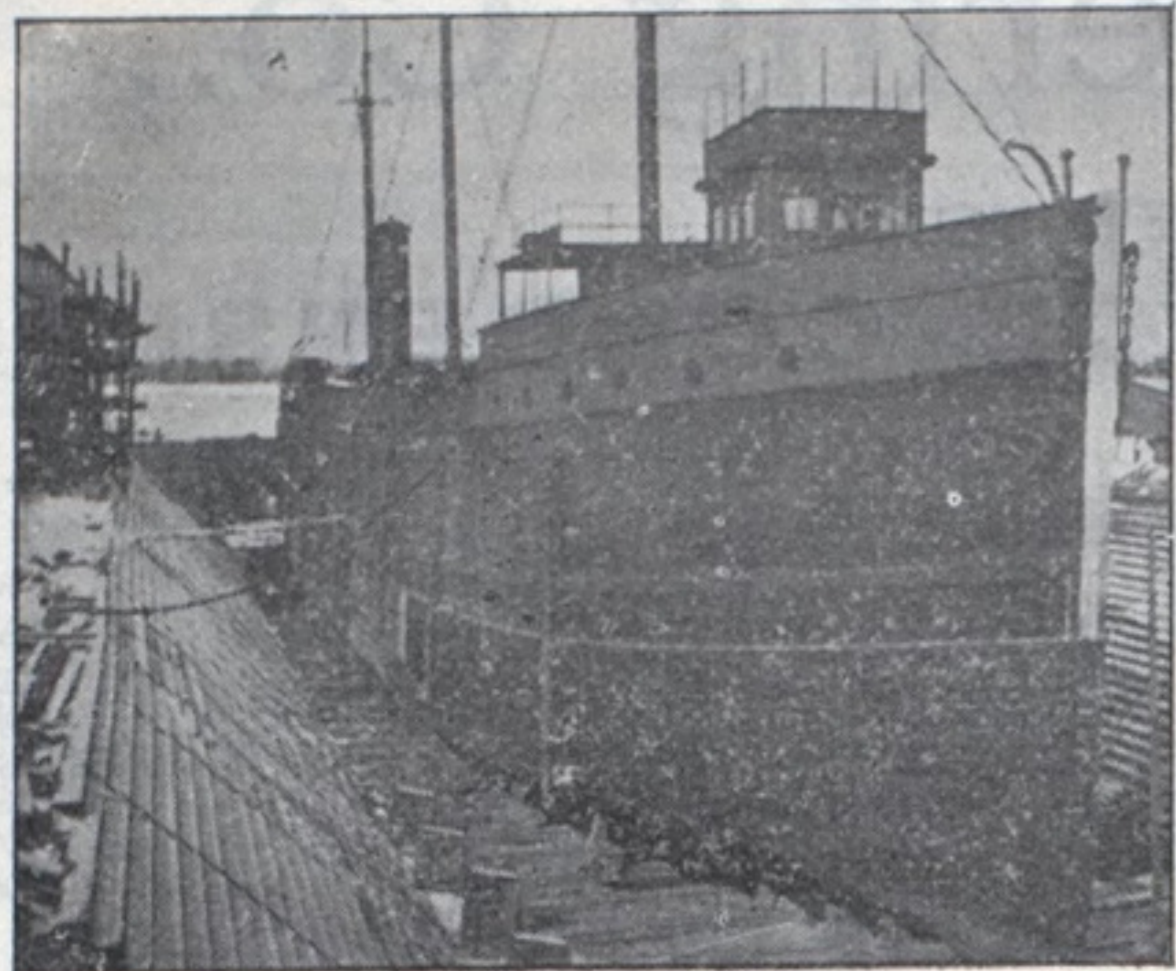
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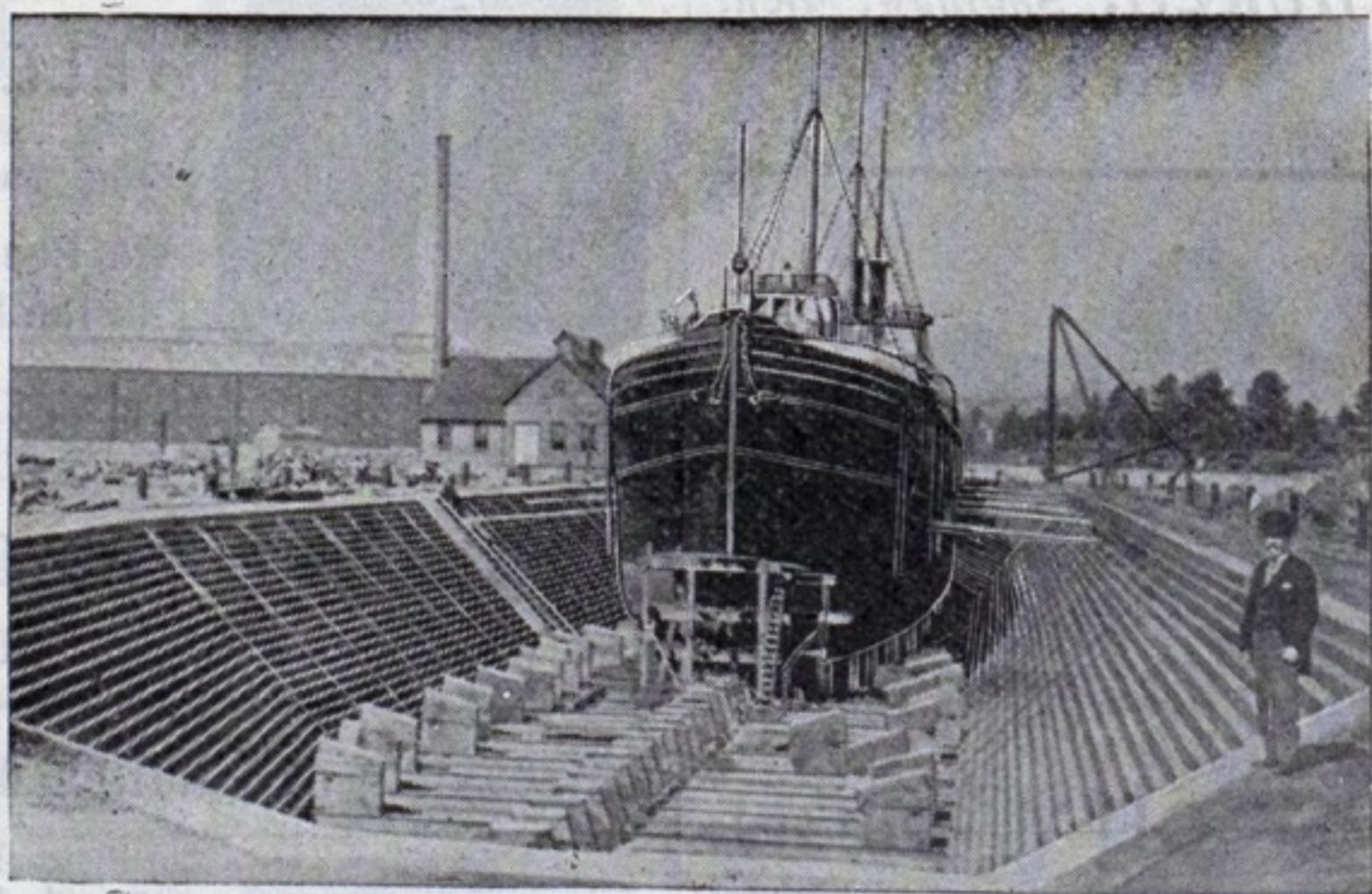
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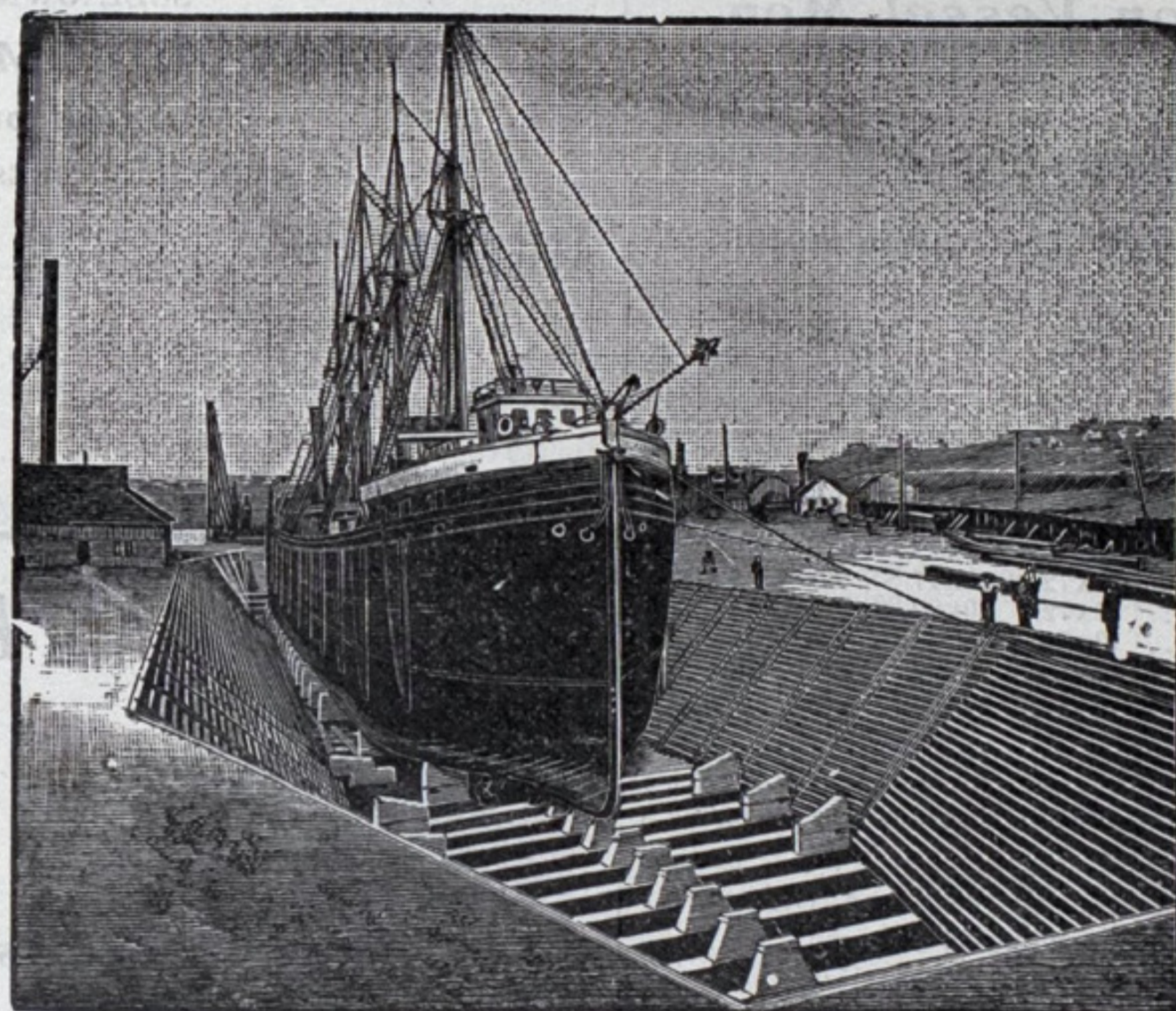
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